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7

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71

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INDEX OF MINING ENGINEERING LITERATURE

COMPRISING AN
INDEX OF MINING, METALLURGICAL, CIVIL, MECHANICAL,
ELECTRICAL AND CHEMICAL ENGINEERING
SUBJECTS AS RELATED TO MINING
ENGINEERING

ALSO
COSTS OF MINING AND METALLURGICAL
OPERATIONS, ETC.

BY
WALTER R. CRANE, PH.D.

DEAN OF THE SCHOOL OF MINES, AND PROFESSOR OF MINING, THE PENNSYLVANIA
STATE COLLEGE, AUTHOR OF "A TREATISE ON GOLD AND SILVER,"
"ORE MINING METHODS," AND NUMEROUS ARTICLES ON MINING

SECOND VOLUME

FIRST THOUSAND

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Library of
Economic Geology~~



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PREFACE TO SECOND VOLUME OF INDEX

IN order that an index may be valuable it must be added to from time to time, including references to the new material in the current technical literature and annual proceedings of societies. To this end the Index of Mining Engineering Literature has been enlarged by the preparation of an additional volume covering the list of publications indexed for the first volume, besides a number of other publications. Still other publications would have been incorporated in this volume of the Index had they been available.

The two special features that distinguish this Index from others are cross-references and multiple references. By the former is meant the reference to other subjects under which information can be obtained relative to the special subject in question; and by the latter is meant the breaking up of a paper or article into a number of references which are distributed under appropriate headings.

The special feature of the present volume of the Index is the list of references on cost which are distributed over and cover practically every phase of mining and metallurgical practice. These references to costs are particularly interesting and valuable to the practicing engineer.

As was stated in the former volume of the Index, the work has been the result of the unaided labor of the author, and all errors are, therefore, due to his oversight.

WALTER R. CRANE.

SCHOOL OF MINES,
THE PENNSYLVANIA STATE COLLEGE,
June 1, 1912.

CONTENTS

	PAGE
ACCIDENTS IN MINING.....	1
Loss of Life in Mining; Causes of Accidents; Protection in Mining; Rescue Work in Mines; Compensation for Injuries; First Aid in Mining Accidents; Falls of Roof and Walls in Mines; Inundation of Mines; Coal Dust as an Explosive Agent; Chambers of Refuge; Mine Fires; Mine Regulations; Spontaneous Combustion in and about Mines; Mine Explosions; Poisoning and Injuries; Powder Explosions; Hoisting Accidents; Boiler Explosions; Earth and Snow Slides—Avalanches; Lightning Entering Mines.	
ANIMALS IN MINES.....	18
Stables.	
BLASTING IN MINES: METHODS AND CONDITIONS.....	18
Blasting in Metal Mines; Blasting in Coal Mines; Methods of Charging and Firing Explosives; Use of Compressed Air in Blasting; Arrangement of Holes in Blasting; Tamping and Tamping Materials; Quantity of Explosive that Should be Used; Large or Mammoth Blasts; Submarine Blasting; Lime Blasting.	
CHEMISTRY: METHODS AND PRACTICE.....	20
General; Determination of Bismuth, Molybdenum, Mercury, Tellurium, Wolfram, etc.; Acid Manufacture; Mineral Analysis; Lime and Cement Analysis; Determination of Antimony, Arsenic, etc.; Methods of Determining Sulphur; Gold and Silver Analysis; Paint Manufacture; Methods of Determining Lead; Methods of Determining Zinc; Chemical Analysis in Cyaniding; Determination of Cobalt, Nickel, Tungsten and Tin; Coal Analysis; Methods of Determining Copper; Electrolytic Analysis; Methods of Determining Iron.	
COMPRESSED AIR IN MINING.....	28
General; Air Compressors, Types, Operation, etc.; Hydraulic Air Compression and Compressors; Compressed Air Haulage; Explosions in Air Compressors, Diseases, etc.	
CLAYS AND THEIR USES.....	29
General Properties of Clays and Methods of Testing; Brick and Clay-Products.	
CONCENTRATION.....	30
General Preparation of Coal; Testing Plants and Laboratories; Theory of Concentration; Founders and Distributors; Jigs and Jigging; Hand Dressing, Sorting; Flotation Processes; Amalgamation of Gold and Silver; Flow Sheets; Use of Plates in Amalgamation; Pan Amalgamation; Amalgamating Apparatus (Amalgamators); The Patio Process of Amalgamation; Electrostatic Separation; Magnetic Separation; Concentrators, Tables, Buddles, etc.; Washing Coal and Mineral; Disposal of Waste; Hand Tests on Mineral; Classifiers and	

	PAGE
Classification; Slimes and Their Treatment; Sand Treatment; Dry Concentration; Salt Making; Practice in Milling Ores.	
CONCRETE, MORTARS AND PLASTERS.....	46
Cement and Concrete, Their Properties and Uses; Use of Concrete in Mines.	
CONVEYORS FOR MINERAL AND COAL.....	49
Kinds of Conveyors, Operation, etc.; Conveyors Underground.	
COST OF MINING, MILLING AND METALLURGICAL OPERATIONS.....	49
Cost Keeping; Cost of Accidents; Cost of Blasting; Cost of Cyaniding; Cost of Industrial Chemistry; Cost of Chlorination; Cost of Development; Cost of Drainage; Cost of Dams, etc.; Cost of Dredging; Cost of Drilling and Boring; Cost of Excavating; Cost of Explosives and Blasting; Cost of Flume and Ditch Construction; Cost of Fuel; Cost of Handling and Storing; Cost of Haulage; Cost of Hoisting; Cost of Hydraulic Mining; Cost of Labor; Cost of Lighting; Cost of Maintenance and Depreciation; Cost of Metallurgical Treatment; Cost of Mine Examination; Cost of Mine and Mill Construction; Cost of Mining; Cost of Mining and Treatment; Cost of Coal Mining; Cost of Metal Mining; Cost of Milling; Cost of Operating Elevators and Conveyors; Cost of Ores and Metals; Cost of Packing and Portage; Cost of Pipe and Pipe Laying; Cost of Power; Cost of Producing Various Materials; Cost of Preserving Mine Timber; Cost of Prospecting; Cost of Pumping and Bailing; Cost of Reduction; Cost of Rope; Charges, Royalties, Taxes, etc.; Cost of Sampling; Cost of Shaft Sinking; Cost of Signaling; Cost of Sizing; Cost of Sorting; Cost of Stoping; Cost of Stripping; Cost of Supplies; Cost of Support; Cost of Surveying; Cost of Trimming; Cost of Operating Tramways; Cost of Transportation; Cost of Tunneling; Cost of Ventilation; Cost of Washing Coal and Ores; Cost of Water.	
DAMS FOR MINING PURPOSES.....	116
Stresses in Dams, Their Stability, and Other Data; Description of Dams and Their Construction; Underground Dams.	
MINING DISTRICTS.....	117
Miscellaneous Districts; Africa; Alabama; Alaska; Argentine Republic; Arizona; Arkansas; Asia; Australia; Austria-Hungary; Belgium; Bolivia; Brazil; California; Canada; The Carolinas; Central America; Chile; China; Colombia and the Guianas; Colorado; Connecticut; Dakotas; Delaware; East Indies — Malaysia; Egypt; England; Florida; France; Georgia; Germany; Idaho; Illinois; India; Indiana; Iowa; Jamaica; Japan; Kansas; Kentucky; Korea; Louisiana; Maine; Maryland; Massachusetts; Mexico; Michigan; Minnesota; Mississippi; Missouri; Montana; Nebraska; Nevada; Newfoundland; New Hampshire; New Hebrides; New Jersey; New Mexico; New York; New Zealand; Nicaragua; Nova Scotia; Ohio; Oklahoma (Indian Territory); Oregon; Panama; Pennsylvania; Peru; Philippine Islands; Portugal; Rhode Island; Russia; Spain; Sweden; Tasmania; Tennessee; Texas; Turkey; United States (General); Utah; Venezuela; Vermont; Virginia; Washington; West Indies; West Virginia; Wisconsin; Wyoming.	

CONTENTS

vii

	PAGE
MINE DRAINAGE.....	179
Drainage in General; Theory of Pumping; Pump Tests, Efficiency, etc.; Pumps for Mine Use; Water Rings for Mine Shafts; Rotary Pumps; Cornish Pumps; Hand Pumps and Water Portage; Hydraulic Pumps; Siphons in Mines; Compressed Air Pumping; Vacuum Pumps; Sinking Pumps; Electrically-Driven Pumps; Bailing Water; Unwatering Shafts; Drainage Tunnels; Pipes and Pipe Fitting; Ditches and Channels; Valves, Valve-gear, Sumps, etc.	
DRILLING AND BORING.....	183
General; Hand Drills; Machine or Power Drills; Air Hammer Drills; Electric Drills; Forming and Tempering Drills; Use of Bore Holes; Prospect Drilling; Drill Records and Reports; Churn Drills and Drilling; Diamond and Rotary Drills; Deep Drilling; Rate of Drilling; Submarine Drilling; Surveying Bore Holes; Reamers for Boring Apparatus.	
THE INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION.....	188
Economic and Industrial Features of Mining; Mining Statistics; The Development and Production of Precious Metal Mining; The Function of Gold and Silver; Conservation; The Copper Trade; The Iron Trade; The Coal Trade; Miscellaneous Production.	
DUMPING DEVICES.....	194
Dumps, Cradles, Tipples, etc.; Rotary Dumps; Self-dumping Cages; Skip Dumps; Bucket Dumps.	
TECHNICAL EDUCATION.....	195
General; Indexes, Textbooks, Bibliographies, etc.; Scope of Technical Education; Mining Education; Engineering Schools; Mining Institutes; Correspondence and Trade Schools; Theory and Practice; Societies, Periodicals and Expositions; Experimentation and Research; Summer School Work; Definitions and Terms; Drawing, Blue-printing, etc.; Weights and Measures; Symbols; Models of Mines and Machinery; Engineering Laboratories, Government Mint, etc.; General Requirements of Engineering Education; Relation of Engineering Education to the Industries.	
EXPLOSIVES FOR MINING PURPOSES.....	206
Development of Explosives; Explosive Regulations for Cities, Mines, etc.; Kinds of Explosives; Manufacture of Explosives; Explosive Properties of Various Materials; Safety Explosives; Primers, Fuses, etc.; Use of Explosives in Mining; Quantity of Explosives Used in Mining; Testing Explosives; Handling Explosives; Storage of Explosives; Thawing Giant Powder.	
FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING.....	209
Composition and Characteristics of Coal; Decomposition of Coal; Coke, Its Properties and Manufacture; Peat as a Fuel; Power Generation by Oil; Buying Coal; Gas for Power: Its Generation and Use; Fuel Substitutes, etc.; Briquetting of Fuels and Ores; Testing Fuels and Their Value.	

	PAGE
GEOLOGY: MINERAL AND FOSSIL FUEL DEPOSITS.....	215
Geological Surveys; Geological Formations; Geology of Districts: General; Glaciers; Geology of Fuels and Ores; Fossil Animals and Plants; Geologic Progress and Studies; Types of Veins and Examples; Caverns and Natural Bridges; Faults: Rules Regarding Them, etc.; Air-blasts, Volcanoes and Earthquakes; Theory of Ore Deposits, Origin of Coal, Petroleum, etc.; Occurrence of Alum and Nitrates; Occurrence of Antimony; Occurrence of Arsenic; Occurrence of Asbestos; Occurrence of Asphalts; Occurrence of Barite; Occurrence of Bismuth; Occurrence of Borax; Distribution of Building Stone; Occurrence of Cement Rock; Occurrence of Workable Clays; Occurrence of Coal and Lignites; Occurrence of Copper and Copper Ores; Occurrence of Diamonds; Diatomaceous Earths; Fuller's Earth Deposits; Occurrence of Feldspar; Occurrence of Fluorspar; Occurrence of Glass Sands; Occurrence of Gold; Occurrence of Graphite; Auriferous Gravels; Occurrence of Gypsum; Occurrence of Iron Ores; Occurrence of Lead and Zinc Ores; Occurrence of Manganese; Miscellaneous Materials; Occurrence of Rare Metals; Occurrence of Mica; Occurrence of Monazite; Occurrence of Natural Gas; Occurrence of Nickel; Ocher Deposits; Occurrence of Onyx, Sapphire, Emerald, Ruby, Turquoise, etc.; Occurrence of Peat; Occurrence of Petroleum; Occurrence of Phosphates; Occurrence of Platinum; Occurrence of Quicksilver; Occurrence of Rutile; Occurrence of Salt; Occurrence of Sulphur; Occurrence of Silver, Cobalt, etc.; Occurrence of Tin; Occurrence of Tungsten; Occurrence of Wolframite.	
HANDLING AND STORAGE OF MINERAL.....	293
Methods of Handling Mineral and Coal; Trimming and Mucking; Loading and Unloading Cars, Boats, etc.; Chutes for Loading Cars and Skips; Weighing Ore and Coal; Elevators; Storage of Coal and Mineral.	
HAULAGE IN MINES.....	295
Tractive Force in Haulage; Haulage Systems; Animal Haulage; Haulage on Inclines; Steam Locomotives; Compressed Air Haulage; Gasoline Motors; Electrical Haulage; Mine Cars: Capacity, Design, Running-Gear, Wheels, etc.; Wheelbarrows; Sheaves, Couplings, Clips, etc.; Mine Roads, Tracks; Switches, Turnouts; Turntables, etc.	
HOISTING IN MINING.....	299
Methods of Hoisting, Appliances, etc.; Calculations for Hoisting Engines; Speed of Hoisting; Electric Hoisting; Pneumatic Hoisting; Hoisting by Water Power; Gas and Oil Hoisting Engines; Deep Winding; Counterbalancing in Hoisting; Overwinding and Its Prevention; Hoisting Buckets, Methods of Dumping, etc.; Windlasses and Whims for Hoisting; Cages for Hoisting; Skips for Raising Minerals; Brakes for Hoists; Drums and Sheaves; Indicators for Hoists; Shaft-Bottom Layouts; Safety Catches for Mine Cages; Ropes, Chains, Couplings, Guides, Cross-Heads, etc.; Cage Keeps, Chairs, etc.; Shaft-Closing Arrangements.	
LABOR IN MINES.....	303
Mine Workmen and Labor Problems; Health of Miners; Apprenticeship in Mining; Labor Troubles, Strikes, etc.; Discipline in Mines;	

CONTENTS

ix

	PAGE
Workmen's Aid and Compensation and Insurance; Labor Unions; Miners' Wages; Miners' Clubs and Changing Houses; Contract Systems and Leasing; Ore Thefts.	
LADDERS IN MINES.....	308
LIFE IN MINES.....	308
MANAGEMENT OF MINES.....	308
Mine Administration; The Engineer and Engineering Ethics; Mine Organisation; Buying and Selling Ore; Mine Managers and Superintendents; Mine Accounts and Bookkeeping; System for Keeping Mining Notes: Filing and Card Systems; Amortization and Depreciation; Stock and Stockholders; Mine Investments; Mining Risks and Frauds; Rating and Taxation of Mining Property.	
MAPS.....	312
Maps of Countries and Districts; Mine Maps; Geological Maps; Map Making.	
METALLURGICAL METHODS AND PROCESSES.....	314
Metallurgical Processes, Theory, etc.; Metallurgical Works; Methods of Assaying, Calculations, etc.; Metallurgy of Copper; Blast Furnace Smelting of Copper; Pyritic Smelting of Copper; Reverberatory Smelting of Copper; Bessemerizing of Copper Matte; Refining of Copper; Electro-Metallurgy; Glass Making; Metallurgy of Gold and Silver; Smelting Gold and Silver; Cyaniding Processes, Theory, etc.; Cyaniding Plants; Chlorination Processes; Refining Gold and Silver; Metallurgy of Iron and Steel; Iron Blast Furnace Method, etc.; Electro-Metallurgy of Iron and Steel; Metallurgy of Lead; Metallurgy of Nickel and Cobalt; Metallurgy of Quicksilver; Metallurgy of Rare Metals; Roasting Ores, Roasting Furnaces, etc.; Smoke Problem: Flue Dust, Fume, Bog Houses, Chimneys, etc.; Metallurgy of Tin; Metallurgy of Zinc; Miscellaneous Information.	
METALS.....	345
Iron: Its Alloys, etc.; Aluminum and Its Properties; Copper, Mass Copper, etc.; Gold and Silver: Properties, Fineness, etc.; Platinum; Quicksilver: Its Properties, etc.; Tin: Its Properties, etc.; Properties of Various Metals.	
MINERALS.....	346
Mineral Determination and Classification; Value of Ore and Its Determination; Miscellaneous Mineral Occurrence; Measurement and Weight of Ore; Gold and Silver Ores and Minerals; Copper Ores and Minerals; Iron Ores, Minerals and Meteorites; Lead and Zinc Ores; Nickel Ores and Minerals; Salt, Quicksilver, Radium, Sulphur, Asbestos, Amber, Phosphates, etc.; Mica and Its Occurrence; Graphite; Corundum, Carborundum, etc.; Asphaltum Compounds; Origin, Properties and Occurrence of Diamonds; Gems and Precious Stones.	
MILL AND MILL CONSTRUCTIONS.....	349
Design of Structures: Materials and Methods of Construction; Mine Buildings, Shops, etc.; Headframes: Wood and Metal Design;	

	PAGE
Tipples: Methods of Construction and Materials; Ore Bins: Materials of Construction and Methods of Calculation; Foundations for Buildings and Mine Constructions; Flumes: Materials of Construction and Design; Tanks for Mining Purposes.	
MINE GASES	352
Mine Atmosphere and Gases; Gases Resulting from Burning Explosives; Occurrence of Gases in Coal; Gas in Mines Other than Coal; Outbursts of Gas in Mines; Detection and Testing of Mine Gases; Mine Gases and Barometric Pressure; Estimation of Quantity of Gases.	
MINING LAW	355
Mining Law: Its Principles and Applications; Mining Law of the Various States and Countries; Mineral Land Acts and Federal Mining Laws; Extra-Lateral Rights and the Law of the Apex; Claims, Taxes, Assessments and Locations; Mining Leases; Tunnel Rights, Tunnel and Mill Sites; Riparian and Water Rights; Decisions; Mining Royalties.	
MINE LIGHTING	358
Illumination of Mines and Buildings; Electricity for Mine Lighting; Acetylene Gas for Mine Lighting; Candles, etc.; Lighting Shafts; Safety Lamps and Testing by Safety Lamps.	
MINING	360
General; Bureau of Mines; Mine Reports; History of Mining; Inspection of Mines; Prospecting: Methods of Procedure, Equipping Camping Outfits, etc.; Divining; Value of Mines; Sampling and Estimation of Mines; Ore Reserves, Ore in Sight, Mine Reports, etc.; Permanence in Depth; Development: Size, Shape, Depth and Methods of Mining Coal, Lignite, etc.; Room-and-Pillar Mining; Longwall Mining; Panel Mining; Drawing Pillars in Coal Mines; Break Down Coal at the Face; Rooms and Entries, etc.; Methods of Mining: General and Miscellaneous; Mining Thick and Massive Deposits; Caving Systems of Mining; Pocket Mining; Drift Mining; Methods of Stopping in Mines; Under-Sea Mining; Mining Frozen Gravels; Packing Mine Workings: Flushing Culm, Use of Waste; River Mining; Deep Mining; Beach Mining; Excavation of Earth; Rock and Ore, Use of Steam Shovels, Mechanical Excavators and Unloaders; Open-cut Mining, Milling Methods; Quarrying Methods; Hydraulic Mining: Methods and Appliances, Giants, Elevators, etc.; Dredging for Gold and Other Materials: Practice and Appliances; Mining Débris, Damages and Litigation; Reworking Abandoned Mines; Waste in Mining; Difficulties Encountered in Mining: High Temperatures, Increase of Temperature with Depth; Abandoned Mines and Districts; Salting of Mines.	
MINE AND MILL MACHINERY	368
Mining Machinery: Its Manufacture and Use; Pulleys and Belts; Bearings and Lubrication; Friction Clutches; Friction Brakes; Protection of Iron and Steel Structures; Mining Machinery at the Face; Electric Coal Mining Machines; Mechanical Mining Appliances: Getters.	

CONTENTS

xi

	PAGE
MINE SUPPORT	390
Mine Support: Conditions Affecting, etc.; Kinds of Support, Timber, etc.; Strength of Timber, Masonry, Coal and Iron for Mine Support; Subsidence in Mine Workings; Size of Pillars, Barrier Pillars, etc.; Methods of Timbering; Tunnel Support; Shaft Lining: Timbering, Tubbing, Cementation, etc.; Square-set Timbering; Preservation of Mine Timber and Structural Steel.	
PHOTOGRAPHY FOR MINES AND TECHNICAL WORK	396
POWER: STEAM, WATER, ELECTRICITY AND GAS	396
General Application of Power; Steam Boilers and Power Plants; Steam Engine Calculations, Tests and Horse-Power; Gas and Oil Engines: Horse-Power, Tests and Calculation of Boilers; Superheated and Wet Steam; Boiler Feed-Water; Condensers for Steam; Feed-Water Heaters for Boilers; Mechanical Feeders for Steam Boilers; The Central Power Plant; Steam Pipes and Coverings; Scale and Boiler Compounds; Consumption and Waste of Coal and Steam; Valves and Valve-Gear for Steam Engines; Water Power Plants: Theory and Practice; Water Wheels, Governors, Data, etc.; The Electric Power Plant and Its Equipment; Electricity in the Mine; Power Transmission: Electricity, Steam, Water and Miscellaneous.	
REDUCTION	401
The Reduction of Ores: Methods and Practice; Automatic Feeders for Reducing Machinery; Crushers: Construction and Operation; Rolls: Construction and Operation; Stamp-Mill Practice; Fine Crushing by Mills: Ball, Tube and Miscellaneous Types.	
ROPES FOR MINE USE	406
Kinds of Wire Rope, Methods of Manufacture, etc.; Wire: Its Use and Manufacture; Paper and Fiber Ropes; Connections for Wire Ropes, Splicing, etc.; Strength of Ropes, Working Stresses, Examination and Tests; Care and Protection of Wire Rope; Breakage of Wire Rope.	
SAMPLING OF MINES	407
Mine Sampling; Methods of Sampling and Apparatus Employed; Sampling Coal and Ores; Sampling and Measurement of Ore Bodies; Practice in Sampling Minerals, Gravels, etc.	
SIZING OF MINERAL	410
Screens, Theory of Sizing: Kinds of Screens and Method of Operation.	
SIGNALING IN MINES	411
Signal Codes for Mines; Methods of Signaling: Compressed Air, Electricity, Telephones, etc.	
SURVEYING	412
Methods of Surveying; Surveying Instruments; Magnetic Surveys; Surface Surveys: Claims, etc.; Underground Surveys; Shaft-Plumbing.	

	PAGE
TRANSPORTATION	414
Methods of Transportation; Portage, Packing and Fluming; Transportation by Rail; Capacity of Cars, Gauge, etc.; Rails, Rail-Sections, etc.; Wagon Roads, Wagons and Traction Engines; River Transportation; Canal Transportation; Lake Transportation; Ocean Transportation; Cableways: Their Construction and Use.	
TUNNELING	417
Methods of Tunneling; Examples of Tunnels; Tunneling Machines.	
MINE VENTILATION	419
Methods of Ventilating Mines, Splitting Air-Currents, etc.; Mechanical Ventilators: Fans: Their Construction and Use; Effect of Size and Shape of Air Ways on Ventilation, etc.; Quantity of Air Needed in Mines; Stopping, Doors and Regulators in Mines; Measurements of Air Currents; Tests on Fans; Efficiency of Fans; Application of Ventilating Methods to Metal and Coal Mines.	
WATER	421
Source and Supply of Water; Measurement of Water; Pollution and Purification of Waters; Water in Milling.	

PUBLICATIONS INDEXED AND ABBREVIATIONS

JOURNALS, TRANSACTIONS AND PROCEEDINGS OF SOCIETIES

- Am. Jour. Min. — American Journal of Mining.
Coll. Engr. — Colliery Engineer.
Coll. Engr. & Met. Miner. — Colliery Engineer and Metal Miner.
Engineering, London.
E. & M. J. — Engineering and Mining Journal.
J. C. M. I. — Journal of the Canadian Mining Institute.
J. C. & M. Soc. S. A. — Journal of the Chemical and Metallurgical Society of South Africa.
J. W. Soc. E. — Journal of the Western Society of Engineers.
J. M. Soc. N. S. — Journal of the Mining Society of Nova Scotia.
Min. Mag. (old series). — Mining Magazine.
Min. Mag. (new series). — Mining Magazine.
Min. Mag., London. — Mining Magazine, London.
M. & M. — Mines and Minerals.
Min. & Sci. Press. — Mining and Scientific Press.
P. C. M. & M. Soc. S. A. — Proceedings of the Chemical, Mining and Metallurgical Society of South Africa.
P. E. Soc. W. Pa. — Proceedings of the Engineering Society of Western Pennsylvania.
P. Soc. P. E. E. — Proceedings of the Society for the Promotion of Engineering Education.
Sch. Mines Quart. — School of Mines Quarterly.
T. A. I. M. E. — Transactions of the American Institute of Mining Engineers.
T. Au. I. M. E. — Transactions of the Australian Institute of Mining Engineers.
T. I. M. E. — Transactions of the Institution of Mining Engineers.
T. I. M. & M. — Transactions of the Institute of Mining and Metallurgy.
T. L. S. M. I. — Transactions of the Lake Superior Mining Institute.
T. N. S. I. M. & M. E. — Transactions of the North Staffordshire Institute of Mining and Mechanical Engineers.
T. F. C. M. I. — Transactions of the Federated Canadian Mining Institute.
U. S. G. S. Publications. — United States Geological Survey Publications, except Water Supply Papers.

PUBLICATIONS INCOMPLETELY INDEXED

Reports of Surveys, Proceedings of Societies, etc.

- Ann. Min. Rept. N. S. Wales. — Annual Mining Report of New South Wales.
Cal. Miners' Assoc. Ann. — California Miners' Association Annual.
Columbia Engr. — Columbia Engineer.
P. I. C. E. — Proceedings of the Institute of Civil Engineers.

Rept. Census Office, Mines and Quarries. — Report Census Office, Mines and Quarries.
 Rept. Insp. Mines Pa. — Report of the Inspector of Mines of Pennsylvania.
 Rept. Zinc Comm. Canada. — Report of the Commission Appointed to Investigate the Zinc Resources of British Columbia, etc.
 Second Geol. Sur. Pa. — Second Geological Survey of Pennsylvania.
 The Mines of the West. — Raymond.
 The Univ. Geol. Surv. of Kans. — The University Geological Survey of Kansas.
 Univ. of Ill. Bull. — University of Illinois Bulletin.
 U. S. Bureau of Mines. — United States Bureau of Mines.

JOURNALS

Am. Engr. & R.R. Jour. — American Engineer and Railroad Journal.
 Coll. Guard. — Colliery Guardian, London.
 Concrete and Constructional Engineering, London.
 Electrochemical Industry.
 Eng. Mag. — Engineering Magazine.
 Eng. News. — Engineering News.
 Eng.-Cont. — Engineering Contracting.
 Mining World.

BOOKS

Anthracite Coal Industry, Roberts.
 Aerial or Wire Rope Tramways, Willis-Taylor.
 Coll. Working and Management, Bulman and Redymayne.
 Diamond Drilling, Denny.
 Earthwork and Its Cost, Gillette.
 Gold Min. & Mill. W. Aus. — Gold Mining and Milling Western Australia, Charleton.
 Kents' Mech. Engrs. Pocket-Book. — Kents' Mechanical Engineers' Pocket-Book.
 Mech. Eng. of Coll. — Mechanical Engineering of Collieries, Futers.
 Mine Building Construction.
 Miners Pocket-Book, Lock.
 Ore Dressing, Richards.
 P. C. M. — Practical Coal Mining, Ed. W. S. Boulton.
 R.R. Construction. — Railroad Construction, Webb.
 Sci. Am. Supp. — Scientific American Supplement.
 The Gold Mines of the Rand, Hatch and Chalmers.
 The Witwatersrand Goldfields, Truscott.
 The Mechanical Handling of Material, Jimmer.
 Tin Deposits of the World.
 Tunneling, Prelini.
 Well-Boring, Isler.

INDEX OF MINING ENGINEERING LITERATURE

ACCIDENTS IN MINING

- NOTES ON RECENT MINE DISASTERS.** By James Ashworth. E. & M. J., vol. 86, p. 332. 3½ columns.
- COLLIERY DISASTERS.** By F. A. Hill. E. & M. J., vol. 86, p. 18. 2 columns.
- See also **COAL DUST AS AN EXPLOSIVE, MINE FIRES, AND MINE EXPLOSIONS.**
- MINE ACCIDENTS.** By J. T. Quine. T. L. S. M. I., vol. 14, p. 71. 10½ pages.
- MINE ACCIDENTS.** By S. Reynolds. M. & M., vol. 29, p. 412. 3 columns.
- ACCIDENTS IN STOPES.** E. & M. J., vol. 87, p. 300. ¼ column.
- MINING ACCIDENTS IN CORNWALL.** Min. Mag., London, vol. 1, p. 119. 6 columns. I.
- ACCIDENTS IN THE COAL MINES OF GREAT BRITAIN.** E. & M. J., vol. 89, p. 975. 4 columns.
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- COAL-MINING ACCIDENTS IN 1907.** M. & M., vol. 29, p. 326. ¼ column.
- METAL-MINING FATALITIES IN IDAHO, FOR 1910.** M. & M., vol. 31, p. 700. 1 column.
- COAL-MINE DISASTERS IN NORTH AMERICA FROM 1869 TO 1910.** E. & M. J., vol. 90, p. 949. Table.
- MINE-ACCIDENT INVESTIGATIONS.** By G. S. Rice. M. & M., vol. 31, p. 282. 6 columns.
- MINE-ACCIDENT INVESTIGATION OF THE UNITED STATES GEOLOGICAL SURVEY.** By G. S. Rice. J. W. Soc. E., vol. 14, p. 784. 37 pages. I.
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- See also **BUREAU OF MINES** under **MINING.**
- ECONOMY AS RELATED TO MINE ACCIDENTS.** By H. E. Coll. E. & M. J., vol. 87, p. 359. 8 columns.
- LEGISLATION ON ACCIDENTS.** Min. & Sci. Press, vol. 20, p. 33. ¼ column.
- COAL TRUSTS AND SAFE MINING (?).** By W. H. Reynolds. M. & M., vol. 31, p. 633. 5 columns.
- RESULTS OF INQUIRIES INTO RECENT MINE DISASTERS.** By F. W. Parsons. E. & M. J., vol. 85, p. 259. 14 columns. I.

Loss of Life in Mining

- DEATH FROM ACCIDENTS IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 171. 5 columns.
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Cause of Accidents

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ACCIDENTS TO MULE DRIVERS. M. & M., vol. 29, p. 288. ½ column.

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EXPLOSIVES AND MINING ACCIDENTS. T. Au. I. M. E., vol. 9, p. 31, 5 pages; p. 42. 10 pages.

COMMON CAUSES OF ACCIDENTS FROM EXPLOSIVES IN MINES. By J. R. Godfrey. T. Au. I. M. E., vol. 9, p. 30. 32 pages.

ACCIDENTS DUE TO FLAMING EXPLOSIVES. E. & M. J., vol. 87, p. 300. 1 column.

ACCIDENTS CAUSED BY MISSED HOLES. E. & M. J., vol. 87, p. 299. 1 column.

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ACCIDENTS IN TRANSPORTING EXPLOSIVES. M. & M., vol. 29, p. 381. 1½ columns.

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ACCIDENTS IN STORING EXPLOSIVES. M. & M., vol. 29, p. 381. 1½ columns.

See also **BLASTING IN MINES AND EXPLOSIVES FOR MINING PURPOSES.**

DANGERS ATTENDING USE OF ELECTRICITY IN COAL MINES. By J. Ashworth. E. & M. J., vol. 88, p. 123. 2½ columns.

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- CARELESSNESS WITH ELECTRICITY.** E. & M. J., vol. 90, p. 726. 1½ columns.
- SAFE USE OF ELECTRICITY IN GASEOUS MINES.** M. & M., vol. 31, p. 126. 1 column.
- See also **ELECTRICITY IN THE MINE.**
- PECULIAR MINE ACCIDENT: A Fire Resulting from Substituting Crude Petroleum for Car Lubricating Oil.** By J. Elliott. M. & M., vol. 29, p. 488. 1½ columns.
- DANGEROUS GASES CAUSING MINE ACCIDENTS.** T. Au. I. M. E., vol. 9, p. 37. 2 pages.
- See also **MINE EXPLOSIONS AND MINE GASES.**
- CARELESSNESS IN MINING: Cause of Accidents.** E. & M. J., vol. 89, p. 526. ½ column.
- CARELESSNESS IN MINES CAUSE OF ACCIDENTS.** M. & M., vol. 30, p. 355. ½ column.
- COAL-MINE ACCIDENTS ARE DUE TO VIOLATIONS OF MINE LAWS.** E. & M. J., vol. 88, p. 1176. 1½ columns.
- MINE ACCIDENTS DUE TO DISREGARD OF LAW.** E. & M. J., vol. 89, p. 578. 1 column.
- THE RESPONSIBILITY FOR RECENT COAL-MINE DISASTERS.** E. & M. J., vol. 85, p. 969. 3½ columns.
- ACCIDENTS DUE TO LAX DISCIPLINE.** E. & M. J., vol. 90, p. 1044. ½ column.
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- Protection in Mining**
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. Min. & Sci. Press, vol. 100, p. 673. 3 columns.
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- MINE-ACCIDENT PREVENTION.** By J. J. Rutledge. M. & M., vol. 31, p. 276. 4½ columns.
- A CHECK SYSTEM FOR GASEOUS MINES.** By O. Cartledge. M. & M., vol. 30, p. 331. 1 column.
- See also **MINE ATMOSPHERE AND GASES.**
- PRECAUTIONARY SUGGESTIONS TO ALABAMA COAL MINERS: Regarding Accidents.** E. & M. J., vol. 89, p. 478. 2 columns.
- PREVENTION OF ACCIDENTS.** M. & M., vol. 31, p. 412. 1 column.
- PREVENTION OF ACCIDENTS IN MINING.** T. L. S. M. I., vol. 14, p. 93. 1 page.
- PREVENTION OF ACCIDENTS IN METAL MINES.** By C. T. Rice. E. & M. J., vol. 87, p. 298. 14½ columns. I.
- PREVENTION OF MINE ACCIDENTS.** Min. & Sci. Press, vol. 97, p. 881. 1½ columns.
- THE PREVENTION OF ACCIDENTS IN COAL MINING.** By E. H. Cox. E. & M. J., vol. 88, p. 410. 9½ columns.
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. E. & M. J., vol. 88, p. 1228. 2½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS.** M. & M., vol. 30, p. 308. 5½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS.** By J. A. Holmes. M. & M., vol. 30, p. 329. 1½ columns.
- PREVENTION OF MINE ACCIDENTS.** By J. Mitchell. M. & M., vol. 30, p. 346. ½ column.
- THE PREVENTION OF MINE ACCIDENTS.** By R. H. Coulson. E. & M. J., vol. 90, p. 1043. 3 columns.
- PREVENTION OF MINE ACCIDENTS.** E. & M. J., vol. 86, p. 1088. 21 columns.
- ACCIDENTS: Preventative Measures.** P. C. M. & M. Soc. S. A., vol. 9, p. 247. 1½ columns.

- SAFETY MEASURES IN MINING.** By Donald Macaulay and L. G. Irvine. P. C. M. & M. Soc. S. A., vol. 6, p. 148, 17 columns; p. 197, 3 columns; p. 226, 4 columns; p. 251, 4 columns; p. 292, 32½ columns; p. 336, 5½ columns; p. 369, 1 column; vol. 7, p. 10, 3½ columns; p. 36, 15 columns; p. 76, 14 columns; p. 111, 18 columns; p. 159, 32 columns.
- TO PREVENT BLOWN-OUT SHOTS.** P. C. M. & M. Soc. S. A., vol. 9, p. 319. 2 columns.
- See also **BLASTING IN MINES.**
- HOW EUROPEAN COLLIERIES ARE SAFEGUARDED.** E. & M. J., vol. 89, p. 829. 7½ columns.
- AUTOMATIC PROTECTIVE SWITCH GEAR FOR COLLIERY SERVICE.** By E. B. Wedmore. T. I. M. E., vol. 38, p. 416. 14 pages. I.
- THE BENNETT SAFETY GEAR.** By S. G. Bennett. T. I. M. E., vol. 38, p. 647. 6 pages. I.
- WHITE WASHING A COAL MINE.** By S. Reynolds. M. & M., vol. 30, p. 16. 2 columns.
- LEVYING OF A FINE FOR EVERY FATAL ACCIDENT.** E. & M. J., vol. 87, p. 300. 1 column.
- TESTING ROOFS IN MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 48. ½ column.
- See also **FALLS OF ROOF AND WALLS IN MINES.**
- GOOD TIMBERING AND DEATH RATE.** P. C. M. & M. Soc. S. A., vol. 8, p. 133. ½ column.
- See also **MINE SUPPORT.**
- SAFE USE OF ELECTRICITY IN COAL MINING.** By G. R. Wood. E. & M. J., vol. 88, p. 19. 7½ columns.
- ELECTRIC SHOCKS IN COAL MINES.** By S. F. Walker. E. & M. J., vol. 90, p. 725. 15 columns.
- See also **CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.**
- PREVENTION OF SHOCKS IN COAL MINES.** E. & M. J., vol. 90, p. 728. ½ column.
- AUTOMATIC FIRE PROTECTION.** By W. A. Neracher. P. E. Soc. W. Pa., vol. 24, p. 321. 17 pages.
- MEANS OF PREVENTING MINE FIRES.** M. & M., vol. 31, p. 274. 1 column.
- See also **MINE FIRES.**
- ON SAFETY APPLIANCES AND PRECAUTIONS NECESSARY IN MINES.** By J. R. Godfrey. T. Au. I. M. E., vol. 6, p. 1. 33 pages. I.
- THE PREVENTION OF MINE ACCIDENTS: Report of Committee to American Mining Congress.** E. & M. J., vol. 90, p. 601. 19 columns.
- SAFETY IN MINES AND MILLS.** E. & M. J., vol. 90, p. 11. 2 columns.
- SAFETY PRECAUTIONS IN ALABAMA COAL MINES.** E. & M. J., vol. 88, p. 780. 1 column.
- SAFETY PRECAUTIONS IN ALABAMA COAL MINES.** By E. H. Cox. E. & M. J., vol. 89, p. 1165. 9½ columns. I.
- SAFETY APPLIANCES IN GERMAN MINES.** By R. W. Voigt. M. & M., vol. 30, p. 460. 3 columns. I.
- See also **SAFETY CATCHES FOR MINE CAGES AND SHAFT-CLOSING ARRANGEMENTS.**
- See also **OVERWINDING AND ITS PREVENTION, AND SAFETY CATCHES FOR MINE CAGES.**
- See also **MINE SUPPORT: Conditions Affecting.**
- See also **COST OF DAMS, etc.**

Rescue Work in Mines

- RESCUE WORK IN MINES.** Min. & Sci. Press, vol. 98, p. 349. 2 columns. I.
- MINE RESCUE WORK.** Min. & Sci. Press, vol. 101, p. 81. 7 columns. I.
- RESCUE WORK IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 100. 1½ columns.
- RESCUE WORK AT HAMSTEAD COLLIERY.** By D. J. Pierce. E. & M. J., vol. 86, p. 5. 1½ columns. I.

- RESCUE WORK AFTER MINE EXPLOSIONS.** E. & M. J., vol. 90, p. 82. 3½ columns.
- RESCUE WORK AT THE ST. PAUL MINE, CHERRY, ILLINOIS.** E. & M. J., vol. 88, p. 1073. 1½ columns.
- THE POSSIBILITIES OF RESCUE WORK IN CONNECTION WITH MINE EXPLOSIONS AND FIRES.** By J. S. Haldane. T. I. M. E., vol. 39, p. 458. 27 pages. I.
- RESCUING THE MEN ENTOMBED AT ALPHA SHAFT NEAR ELY, NEVADA.** By E. W. Walter. E. & M. J., vol. 85, p. 407. 3½ columns.
- TO AVOID RESCUE WORK.** M. & M., vol. 30, p. 593. 1 column.
- PROVISIONS FOR MINE RESCUE IN BRITISH COLUMBIA.** E. & M. J., vol. 90, p. 201. 1 column.
- COLLIERY RESCUE BRIGADES IN GREAT BRITAIN.** M. & M., vol. 31, p. 667. ½ column.
- SUGGESTIONS FOR THE ORGANIZATION OF COLLIERY RESCUE BRIGADES.** By Sgt. A. T. Winborn. T. I. M. E., vol. 37, p. 81, 19 pages. I.; p. 294, 20 pages.
- THE AEROLITH RESCUE APPARATUS.** M. & M., vol. 31, p. 521. 3½ columns. I.
- A NEW BREATHING APPARATUS.** M. & M., vol. 31, p. 759. 2½ columns. I.
- TISSOT BREATHING APPARATUS FOR RESCUE WORK.** By H. Briggs. E. & M. J., vol. 89, p. 1027. 7½ columns. I.
- AEROLITH BREATHING APPARATUS.** By Alfred Gradenwitz. E. & M. J., vol. 85, p. 105. 2 columns. I.
- THE WEG BREATHING APPARATUS.** E. & M. J., vol. 85, p. 366. 2 columns. I.
- BREATHING APPLIANCES FOR MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 65. 2 columns.
- ROYAL COMMISSION ON MINES AND BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 94. 3 columns.
- POINTS IN BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 397. ½ column.
- REQUIREMENTS OF A BREATHING APPARATUS FOR USE IN MINES.** By W. E. Mingramm. T. A. I. M. E., vol. 39, p. 341. 9½ pages. I.
- THE USE OF BREATHING APPARATUS AT A MINE FIRE IN CAPE BRETON, WITH SOME NOTES ON THE CENTRAL RESCUE STATION OF THE DOMINION COAL COMPANY, LIMITED, AT GLACE BAY, CAPE BRETON, NOVA SCOTIA.** By F. W. Gray and James McMahon. T. I. M. E., vol. 37, p. 100. 18 pages.
- BREATHING APPARATUS FOR USE IN MINES: Discussion.** T. I. M. E., vol. 36, p. 53. 3 pages.
- RESPIRATION DEVICES FOR MINES: The Artificial Regeneration of Air for Respiration in Life-Saving Apparatus for Mining Service.** P. C. M. & M. Soc. S. A., vol. 5, p. 191. 2 columns.
- SELF-CONTAINED RESPIRATING APPARATUS IN MINES.** By A. E. Davidson. M. & M., vol. 29, p. 118. ½ column.
- OXYGEN HELMETS USED AT MINE FIRES.** By O. Callidge. M. & M., vol. 30, p. 712. 1 column.
- OXYGEN HELMETS USED AT MINE FIRE.** By T. A. Carraher. M. & M., vol. 31, p. 161. 1½ columns. I.
- LIQUID OXYGEN FOR RESCUE WORK IN COAL MINES.** By A. Gradenwitz. E. & M. J., vol. 88, p. 923. 4½ columns. I.
- TESTS OF LIFE-SAVING APPLIANCES FOR MINES.** By R. Grimshaw. E. & M. J., vol. 87, p. 1192. 2 columns.
- RESCUE APPARATUS IN AUSTRIAN MINES.** E. & M. J., vol. 87, p. 414. ½ column.
- RESCUE APPARATUS FOR MINES.** E. & M. J., vol. 86, p. 8. 1½ columns.
- RESCUE APPARATUS IN COAL MINES.** By W. E. Mingramm. E. & M. J., vol. 85, p. 900. 5 columns. I.

- RESCUE APPARATUS FOR USE IN COAL MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 160. 2½ columns.
- RESCUE APPLIANCES: Lessons from Glencoe.** By H. Kestner. P. C. M. and M. Soc. S. A., vol. 8, p. 306, 11 columns, I.; p. 385, 1 column; vol. 9, p. 21, ½ column; p. 41, 8½ columns, I.
- ON THE PRACTICAL USE AND VALUE OF COLLIERY RESCUE: Apparatus, and the Organization of Rescue Corps.** By Geo. B. Walker. T. I. M. E., vol. 36, p. 536. 19 pages.
- DREGER LIFE-SAVING APPARATUS IN A MINE FIRE.** Min. & Sci. Press, vol. 97, p. 401. ½ column.
- A NEW SMOKE HELMET FOR MINE-FIRE FIGHTING.** M. & M., vol. 31, p. 281. ½ column. I.
- THE ANACONDA FIRE HOOD.** By R. N. Bell. M. & M., vol. 29, p. 175. 2 columns. I.
- See also **MINE FIRES.**
- THE ANACONDA PROTECTIVE HOOD.** By R. N. Bell. E. & M. J., vol. 86, p. 708. 2 columns. I.
- REGENERATION OF AIR FOR SUBMARINES WITH FUSED SODIUM PEROXIDE.** P. C. M. & M. Soc. S. A., vol. 7, p. 51. 1 column.
- EUROPEAN LAWS REGARDING BREATHING APPARATUS.** M. & M., vol. 31, p. 413. ½ column.
- COAL COMPANIES ESTABLISH RESCUE STATIONS.** E. & M. J., vol. 87, p. 951. 2 columns.
- MINE RESCUE LABORATORY.** By R. Y. Williams. M. & M., vol. 29, p. 537. 2 columns. I.
- AN ENGLISH RESCUE STATION.** M. & M., vol. 29, p. 100. 3 columns. I.
- MINE RESCUE STATIONS AND MINE ACCIDENTS.** E. & M. J., vol. 89, p. 281. 4 columns.
- RESCUE STATION AT LEISENRING No. 1.** By C. B. Franks. M. & M., vol. 30, p. 599. 2½ columns.
- RESCUE STATIONS IN ILLINOIS.** By R. Y. Williams. M. & M., vol. 31, p. 214. 5 columns. I.
- MINE RESCUE STATIONS IN ILLINOIS.** By R. Y. Williams. E. & M. J., vol. 90, p. 176. 7½ columns. I.
- RESCUE STATIONS IN ILLINOIS COAL-MINING LOCALITIES.** By R. Y. Williams. J. W. Soc. E., vol. 15, p. 655. 23½ pages. I.
- See also **PROTECTION IN MINING.**
- Compensation for Injuries**
- MINER'S ACCIDENT RELIEF FUND.** E. & M. J., vol. 90, p. 25. ½ column.
- COMPENSATION TO WORKERS FOR ACCIDENTAL INJURIES.** By M. M. Duncan. E. & M. J., vol. 88, p. 519. 4½ columns.
- COMPENSATION FOR INDUSTRIAL ACCIDENTS.** By D. Ross. Min. & Sci. Press, vol. 101, p. 744. 5½ columns.
- COMPENSATION TO WORKMEN IN CASE OF INJURIES.** By M. M. Duncan. T. L. S. M. I., vol. 14, p. 47. 6 pages.
- COMPENSATION FOR INJURY.** By R. P. Tarr. M. & M., vol. 31, p. 410. 6½ columns.
- TAX FOR COMPENSATION TO INJURED.** P. C. M. & M. Soc. S. A., vol. 9, p. 246. Note.
- See also **WORKMAN'S AID, COMPENSATION AND INSURANCE.**
- MINER'S BENEFIT FUND.** E. & M. J., vol. 90, p. 1013. ½ column.
- HOMESTAKE AID FUND.** E. & M. J., vol. 90, p. 309. 1½ columns.
- INSURANCE AND MINE ACCIDENTS.** By G. W. Traer. Min. & Sci. Press, vol. 99, p. 717. 2 columns.
- ACCIDENT LIABILITY AND COMPENSATION.** E. & M. J., vol. 90, p. 23. 1½ columns.
- INDUSTRIAL ACCIDENTS AND EMPLOYEES LIABILITY LAWS.** By D. Ross. Min. & Sci. Press, vol. 99, p. 716. 2½ columns.

LIABILITY FOR INDUSTRIAL ACCIDENTS.

By Sion B. Smith. M. & M., vol. 31, p. 501. 5 columns.

POSSIBILITIES OF A NEW LIABILITY

LAW. By S. Reynolds. M. & M., vol. 31, p. 532. 7½ columns.

See also **WORKMEN'S AID, COMPENSATION AND INSURANCE.**

First Aid in Mining Accidents

FIRST AID TO THE INJURED IN COAL MINES. By M. J. Shields.

Coal Mining Supplement, E. & M. J., vol. 88, p. 42. 8 columns. I.

FIRST AID FOR INJURED SPINES. By T. C. Harvey. M. & M., vol. 31, p. 538. 1½ columns. I.

SUGGESTIONS FOR ORGANIZED UNDERGROUND AMBULANCE WORK. T. I. M. E., vol. 37, pp. 42-44, 218-223.

FIRST-AID CORPS IN ALABAMA COAL MINES. E. & M. J., vol. 89, p. 1166. ½ column.

WILL FIRST AID CORPS LAST? M. & M., vol. 29, p. 407. 1 column.

ORGANIZATION OF FIRST-AID CORPS. By M. J. Shields. M. & M., vol. 29, p. 379. 3½ columns.

FIRST-AID WORK IN NEW SOUTH WALES. M. & M., vol. 30, p. 366. ½ column.

THE FIRST AID MOVEMENT. By H. H. Stoek. M. & M., vol. 29, p. 243. 11 columns. I.

FIRST-AID WORK AT COAL MINES. By J. H. Ketner. M. & M., vol. 31, p. 490. 2 columns. I.

METHODS OF RESUSCITATION. P. C. M. & M. Soc. S. A., vol. 10, p. 303. 2 columns.

RESUSCITATION AFTER ELECTRIC SHOCK. M. & M., vol. 30, p. 91. 1½ columns.

See also **CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.**

APPARATUS FOR CONVEYING WOUNDED MEN FROM STOPES. E. & M. J., vol. 89, p. 1263. 1 column. I.

See also **HEALTH OF MINERS.**

FIRST-AID CONTEST AT INKERMEN. M. & M., vol. 30, p. 225. 3 columns. I.

FIRST-AID CONTEST. By C. A. Graves. M. & M., vol. 29, p. 172. 2 columns. I.

FIRST-AID CONTESTS. M. & M., vol. 31, p. 197. 8½ columns. I.

READING FIRST-AID FIELD DAY. By H. H. Stoek. M. & M., vol. 30, p. 121. 4 columns. I.

See also **PROTECTION IN MINING.**

Falls of Roof and Walls in Mines

FALLS IN SHAFTS: Shaft Accidents. By F. H. Wynne. T. I. M. E., vol. 38, p. 653. 18 pages.

FALL OF LABORER DOWN THE RED JACKET SHAFT. E. & M. J., vol. 90, p. 749. Note.

WARRIOR RUN MINE ACCIDENT. M. & M., vol. 29, p. 121. 2 columns. I.

ACCIDENTS CAUSED BY FALL OF ROCK AND COAL. E. & M. J., vol. 88, p. 412. ½ column.

ACCIDENTS CAUSED BY FALLING ROCK IN METAL MINES. E. & M. J., vol. 87, p. 301. 1½ columns.

SUMMARY OF THE "REPORT OF A COMMITTEE APPOINTED BY THE ROYAL COMMISSION ON MINES TO INQUIRE INTO THE CAUSES OF AND MEANS OF PREVENTING ACCIDENTS FROM FALLS OF GROUND, UNDERGROUND HAULAGE, AND IN SHAFTS: Shaft Accidents. By F. H. Wynne. T. I. M. E., vol. 38, p. 653. 18 pages.

SUMMARY OF THE "REPORT OF A COMMITTEE APPOINTED BY THE ROYAL COMMISSION ON MINES TO INQUIRE INTO THE CAUSES OF AND MEANS OF PREVENTING ACCIDENTS FROM FALLS OF GROUND, UNDERGROUND HAULAGE, AND IN SHAFTS," Part II: Falls of Roof and Sides. By W. Charlton and F. H. Wynne. T. I. M. E., vol. 39, p. 378. 20 pages.

THE ALPHA SHAFT DISASTER. By W. S. Larsh. *M. & M.*, vol. 29, p. 104. 4 columns. I.

See also **SUBSIDENCE IN MINE WORKINGS.**

See also **CAUSE OF ACCIDENTS.**

Inundation in Mines

DANGER OF INRUSHES OF SURFACE WATER. E. & M. J., vol. 90, p. 973. 4½ columns. I.

TAPPING MINE WATER UNDER GREAT PRESSURE. By Robert Sibley. E. & M. J., vol. 85, p. 562. 9½ columns. I.

FLOOD DAMAGE AT THE GREAT FALLS SMELTER, MONTANA. By F. S. Shewell. *Min. & Sci. Press*, vol. 97, p. 57. 2½ columns. I.

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THE EXPLOSION AT THE MEXICAN MINE. By R. A. Kinzie. M. & M., vol. 30, p. 639. 1½ columns. I.

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Hoisting Accidents

See first volume of Index.

Boiler Explosion

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See also first volume of Index.

Earth and Snow Slides: Avalanches

SNOWSLIDES IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 505. ¼ column. I.

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Lightning Entering Mines

See first volume of Index.

ANIMALS IN MINES

- MINE MULES AND THEIR CARE.** By Robert Grimshaw. E. & M. J., vol. 86, p. 25. 3 columns.
- TREATMENT OF MINE PONIES.** By A. H. Stokes. E. & M. J., vol. 89, p. 1240. 3 columns.
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- CONCRETE BATH TUB FOR MINE MULES.** E. & M. J., vol. 90, p. 593. ½ column.

Stables

- INSIDE STABLES FOR MINES.** By J. W. Byers. M. & M., vol. 30, p. 477. 2½ columns.
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- THE THEORY OF BLASTING WITH HIGH EXPLOSIVES.** By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 9, p. 111. 16½ columns, I.; p. 193; 2 columns, I.; p. 232, 6 columns; p. 343, 5 columns.
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- CONDITION AFFECTING LENGTH OF DRILL HOLE TO BE USED.** E. & M. J., vol. 85, p. 440. 2 columns.
- A NEW METHOD OF BLASTING.** E. & M. J., vol. 85, p. 459. ½ column.
- METHOD OF BLASTING IN ROOM-WORK, THE POCAHONTAS REGION.** M. & M., vol. 29, p. 399. ½ column. I.
- THE KNOX SYSTEM OF BLASTING.** M. & M., vol. 31, p. 36. ½ column.
- BLASTING IN MINES: Suggestions of Committee to American Mining Congress.** E. & M. J., vol. 90, p. 603. 1 column.
- USE OF HIGH EXPLOSIVES IN MINING.** E. & M. J., vol. 89, p. 207. 1½ columns.
- LOADING A BLAST HOLE.** E. & M. J., vol. 86, p. 433. 1½ columns. I.
- LOADING BLAST HOLES.** E. & M. J., vol. 86, p. 971. 2½ columns.
- LOADING BLAST HOLES.** E. & M. J., vol. 86, p. 1111. 1 column.
- CIRCUIT TESTERS FOR BLASTERS.** E. & M. J., vol. 90, p. 1195. 1½ columns.
- A CIRCUIT TESTER FOR BLASTING.** Min. & Sci. Press, vol. 101, p. 543. 1 column.
- DRILLING AND BLASTING AT THE KALGOORLIE MINES, WEST AUSTRALIA.** E. & M. J., vol. 85, p. 196. 1 column.
- PLACING CHARGES IN CHURN DRILL HOLES, BINGHAM CANYON, UTAH.** Min. & Sci. Press, vol. 98, p. 554. ½ column.
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- CHURN DRILLING FOR BLASTING.** E. & M. J., vol. 88, p. 178. ½ column.
- See also CHURN DRILLS AND DRILLING.
- BLASTING IN OIL-SHALE MINING, SCOTLAND.** T. I. M. E., vol. 36, p. 586. ½ page.
- BLASTING IN STOPING.** P. C. M. & M. Soc. S. A., vol. 9, p. 233. 5 columns.
- BLASTING IN STOPING.** P. C. M. & M. Soc. S. A., vol. 9, p. 198. 4 columns. I.
- THE USE OF EXPLOSIVES IN HARD GROUND.** T. Au. I. M. E., vol. 11, p. 163. 1 page.
- BLASTING SUPPLIES.** By F. H. Gundersolus. M. & M., vol. 31, p. 222. 6 columns. I.

See also EXPLOSIVES FOR MINING PURPOSES.

BLOWN-OUT SHOTS. P. C. M. & M. Soc. S. A., vol. 9, p. 319. 2 columns.

WINDY SHOTS IN COAL MINES. E. & M. J., vol. 87, p. 467. 2 columns.

See also CAUSES OF ACCIDENTS, AND MINE EXPLOSIONS.

Blasting in Metal Mines

See also COST OF BLASTING.

Blasting in Coal Mines

See first volume of Index.

Methods of Charging and Firing Explosives

THE ORIGIN OF ELECTRIC SHOT FIRING. E. & M. J., vol. 89, p. 1002. $\frac{1}{2}$ column.

PRINCIPLES OF ELECTRIC BLASTING. By W. G. Hudson. M. & M., vol. 31, p. 393. 7 columns. I.

A SELECTIVE ELECTRIC FUSE SPITTING DEVICE. By R. N. Bell. E. & M. J., vol. 86, p. 528. 2 $\frac{1}{2}$ columns. I.

SHOT-FIRING BY ELECTRICITY. By D. Harrington. M. & M., vol. 29, p. 38. 4 $\frac{1}{2}$ columns. I.

FIRING SHOTS FROM THE ELECTRICAL POWER SERVICE. E. & M. J., vol. 87, p. 617. 1 $\frac{1}{2}$ columns.

ELECTRIC SHOT-FIRING IN COAL MINES. By D. Harrington. E. & M. J., vol. 87, p. 243. 12 columns.

FIRING SHOTS IN MINES BY ELECTRICITY. By S. F. Walker. E. & M. J., vol. 89, p. 228. 6 $\frac{1}{2}$ columns. I.

ELECTRIC FIRING OF EXPLOSIVES. E. & M. J., vol. 89, p. 670. 1 $\frac{1}{2}$ columns.

ELECTRIC SHOT-FIRING. By J. Douglas. T. I. M. E., vol. 38, p. 332. 5 pages.

METHOD OF SHOOTING COAL BY BATTERY IN THE STAG CAÑON FUEL COMPANY'S MINES, New Mexico. T. A. I. M. E., vol. 40, p. 361. 1 page. I.

GROUP ELECTRIC SHOT FIRING. By S. F. Walker. E. & M. J., vol. 85, p. 1249. 5 columns.

COUPLING OF BLASTING-CHARGES IN ELECTRICAL SHOT-FIRING. $\frac{1}{2}$ p. abst. T. I. M. E., vol. 26, p. 624.

FAILURE OF SHOTS FIRED ELECTRICALLY. E. & M. J., vol. 89, p. 229. $\frac{1}{2}$ column.

See also ELECTRICITY IN THE MINE.

SHOT-FIRING IN COAL MINES: Suggestions. By J. J. Rutledge. E. & M. J., vol. 87, p. 13. 2 $\frac{1}{2}$ columns.

See also USE OF EXPLOSIVES IN COAL MINING.

SHOT FIRERS. By Pete Hauraty. M. & M., vol. 29, p. 552. 2 $\frac{1}{2}$ columns.

THE SHOT-FIRER'S DUTIES. E. & M. J., vol. 87, p. 244. 1 $\frac{1}{2}$ columns.

See also MINE REGULATIONS.

CAUSE OF MISFIRES. E. & M. J., vol. 87, p. 244. $\frac{1}{2}$ column.

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See also CAUSE OF ACCIDENTS.

METHOD OF CHARGING PERMISSIBLE EXPLOSIVES. E. & M. J., vol. 89, p. 671. 1 $\frac{1}{2}$ columns.

CHARGING BLAST HOLES: Method of Demonstrating Employed by the Pittsburg Testing Station. M. & M., vol. 31, p. 44. 1 $\frac{1}{2}$ columns. I.

LOADING HOLES IN BLASTING. E. & M. J., vol. 87, p. 245. 1 column.

LOADING BLAST HOLES AND DRIVING SMALL DRIFTS. By G. C. McFarlane. E. & M. J., vol. 87, p. 225. 3 $\frac{1}{2}$ columns.

LOADING A HOLE WITH DYNAMITE. E. & M. J., vol. 85, p. 491. 1 column.

PREPARATIONS FOR BLASTING. By M. T. Hoster. E. & M. J., vol. 89, p. 1006. 2 $\frac{1}{2}$ columns.

BLASTING AND PREPARING THE SHOT. By D. H. Stovall. Min. & Sci. Press, vol. 98, p. 699. 1 $\frac{1}{2}$ columns.

See also TAMPING AND TAMPING MATERIALS.

Use of Compressed Air in Blasting

See first volume of Index.

Arrangement of Holes in Blasting

FIRING OF SHOTS: Order Preferred in Hard Ground. T. Au. I. M. E., vol. 11, p. 161. 1 page.

ARRANGEMENT OF HOLES IN DRIFTING IN HARD GROUND. T. Au. I. M. E., vol. 11, p. 158. 3 pages. I.

ARRANGEMENT OF HOLES IN DRIVING THE ELIZABETH TUNNEL. M. & M., vol. 31, p. 102. I.

ARRANGEMENT OF HOLES IN HEADINGS, WABANA MINES. J. C. M. I., vol. 13, p. 635. I.

ARRANGEMENT OF HOLES IN BLASTING. P. C. M. & M. Soc. S. A., vol. 6, p. 42. 8 columns. I.

ARRANGEMENT OF HOLES IN DRIFTING, RAY, NEVADA. M. & M., vol. 29, p. 546. I.

THE LEYNER CUT: Arrangement of Holes in Drifting. M. & M., vol. 30, p. 652. 1 column. I.

ARRANGEMENT OF HOLES IN DRIVING HEADINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 263. $\frac{1}{2}$ column. I.

See also **METHODS OF TUNNELING AND SHAFT SINKING.**

Tamping and Tamping Materials

TAMPING DYNAMITE CHARGES. E. & M. J., vol. 85, p. 640. $\frac{1}{2}$ column.

TAMPING SHOT HOLES IN COAL MINES. E. & M. J., vol. 87, p. 813. $1\frac{1}{2}$ columns.

SAND TAMPING. P. C. M. & M. Soc. S. A., vol. 6, p. 228. $\frac{1}{2}$ column.

THE USE OF STEEL TAMPING BARS. E. & M. J., vol. 86, p. 42. $\frac{1}{2}$ column.

ECONOMIC TAMPERS: Prepared Tamping for Blasting. E. & M. J., vol. 89, p. 699. 1 column. I.

TAMPING IN BLASTING. E. & M. J., vol. 87, p. 225. $1\frac{1}{2}$ columns.

See also **METHODS OF CHARGING AND FIRING EXPLOSIVES.**

Quantity of Explosive That Should Be Used

See first volume of Index.

Large or Mammoth Blasts

Bank-Blasting at Bingham Canyon, Utah. Min. & Sci. Press, vol. 98, p. 520. $\frac{1}{2}$ column. I.

MAMMOTH BLASTS IN THE CARIBOO HYDRAULIC MINES. Min. & Sci. Press, vol. 95, p. 304. $\frac{1}{2}$ column.

See also **COST OF EXPLOSIVES AND BLASTING.**

Submarine Blasting

See also **COST OF EXCAVATING AND COST OF EXPLOSIVES AND BLASTING.**

Lime Blasting

See first volume of Index.

CHEMISTRY: METHODS AND PRACTICE**General**

REPORT OF THE INTERNATIONAL COMMITTEE ON ANALYSIS TO THE SIXTE INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY AT ROME, 1906. P. C. M. & M. Soc. S. A., vol. 7, p. 89. $9\frac{1}{2}$ columns.

THE INDUSTRIAL OUTLOOK FOR PHYSICAL CHEMISTRY. By A. Sang. P. E. Soc. W. Pa., vol. 23, p. 32. 15 pages.

THE TECHNICAL ANALYSIS OF FLUOSPAR. P. C. M. & M. Soc. S. A., vol. 7, p. 52. $\frac{1}{2}$ column.

A SYSTEM OF QUANTITATIVE ANALYSIS FOR THE COMMON ELEMENTS. P. C. M. & M. Soc. S. A., vol. 7, p. 373. $1\frac{1}{2}$ columns.

VALUE OF FLUE-GAS ANALYSIS. E. & M. J., vol. 86, p. 858. $\frac{1}{2}$ column.

- GRADING ANALYSES AND THEIR APPLICATION.** By H. Stadler. P. C. M. & M. Soc. S. A., vol. 10, p. 382. 16½ columns. I.
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- SOURCES OF ERROR IN ANALYSES.** By R. C. Benner. Min. & Sci. Press, vol. 100, p. 492. 4 columns. I.
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- MINE LABORATORY WORK AT GARY, WEST VIRGINIA.** By V. Klier. M. & M., vol. 31, p. 217. 3½ columns. I.
- TECHNICAL METHODS OF ANALYSIS.** By W. A. Seamon. Min. & Sci. Press, vol. 95, p. 249. 3½ columns.
- ANALYTICAL METHODS IN THE CAN-
ADELA LABORATORY.** By F. G. Haw-
ley. E. & M. J., vol. 90, p. 647.
12 columns.
- NEW ANALYTICAL METHODS.** By F.
H. Mason. Min. & Sci. Press., vol.
100, p. 683. 2 columns.
- A RAPID METHOD OF QUANTITATIVE
ANALYSIS.** P. C. M. & M. Soc. S.
A., vol. 9, p. 242. 2 columns.
- NEW METHODS FOR THE PREPARATION
OF HYDROGEN SULPHIDE.** P. C. M.
& M. Soc. S. A., vol. 7, p. 371.
1 column.
- THE ANALYSES OF SOME WITWATERS-
RAND SOILS.** By E. H. Croghan.
P. C. M. & M. Soc. S. A., vol. 5,
p. 18, 7 columns; p. 79, 6 columns;
p. 97, 6 columns.
- DETECTION OF MERCURY IN NITRO-
GLYCERINE.** P. C. M. & M. Soc.
S. A., vol. 9, p. 214. 1½ columns.
- See also **TESTING EXPLOSIVES.**
- FRACTIONATION OF CRUDE PETROLEUM
BY CAPILLARY FILTRATION.** By D.
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Methods of Determining Iron

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COMPRESSED AIR IN MINING

General

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See also OCCURRENCE OF GRAPHITE.

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Use of Plates in Amalgamation

NOTES ON THE SCALING AND SWEATING OF COPPER BATTERY PLATES. By S. F. Goddard. T. I. M. & M., vol. 18, p. 495. 4 pages.

THE SILVER COATING OF AMALGAMATING PLATES. P. C. M. & M. Soc. S. A., vol. 9, p. 142. 2 columns. I.

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THE USE OF ELECTRO-PLATED COPPER PLATES IN THE BATTERY. By F. W. Cindel. P. C. M. & M. Soc. S. A., vol. 5, p. 92, 6 columns; p. 175, 3 columns; p. 205, $1\frac{1}{2}$ columns; p. 316, $\frac{1}{2}$ column.

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Pan Amalgamation

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Amalgamating Apparatus (Amalgamators)

THE PIERCE AMALGAMATOR. E. & M. J., vol. 85, p. 112. 1 column. I.

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The Patio Process of Amalgamation

THE PATIO PROCESS. By C. P. Duarte. P. C. M. & M. Soc. S. A., vol. 9, p. 105. 9½ columns.

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THE PATIO PROCESS AT THE GUADALUPE HACIENDA, PACHUCA, MEXICO. E. & M. J., vol. 86, p. 559. 5 columns. I.

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See also COST OF MILLING.

Electrostatic Separation

ELECTROSTATIC SEPARATION. By H. A. Wentworth. Min. & Sci. Press, vol. 101, p. 567. 2½ columns.

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AN ELECTROMAGNET FOR TESTING THE SUITABILITY OF AN ORE FOR MAGNETIC SEPARATION. By L. H. L. Huddart. E. & M. J., vol. 85, p. 1008. 1½ columns. I.

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MAGNET USED IN THE SEPARATION OF TIN-OXIDE FROM WOLFRAM. T. I. M. & M., vol. 17, p. 157. Note. I.

THE SEPARATION OF TIN-OXIDE FROM WOLFRAM. By A. Treloar. T. I. M. & M., vol. 17, p. 137. 22 pages. I.

MAGNETIC SEPARATION OF MONAZITE IN THE CAROLINAS. T. A. I. M. E., vol. 40, p. 332. 6 pages. I.

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See also COST OF MILLING.

Concentrators, Tables, Buddles, Etc.

THEORY OF THE ACTION OF THE WILFLEY TABLE. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

THE WILFLEY TABLE, I. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

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USE OF WILFLEY TABLES IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 822. 3 columns.

CONCENTRATION OF FINE SANDS ON A BELT VANNER. By T. M. Owen and J. F. Stephen. T. A. I. M. E., vol. 13, p. 143. 10 $\frac{1}{2}$ pages.

See also SAND TREATMENT.

TREATMENT OF SLIMES ON VANNERS. By R. Gahl. T. A. I. M. E., vol. 40, p. 517. 21 $\frac{1}{2}$ pages. I.

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See also DREDGING FOR GOLD AND OTHER MATERIALS.

THE HENNING CONCENTRATING TABLE. E. & M. J., vol. 86, p. 134. 1 column. I.

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- THE GREASE TABLE FOR COLLECTING DIAMONDS.** E. & M. J., vol. 89, p. 371. $\frac{1}{2}$ column.
- CONSTRUCTION OF CANVAS TABLES FOR CANVAS SLIME PLANT.** E. & M. J., vol. 89, p. 356. 2 columns. I.
- AN IMPROVED BLANKET TABLE.** By T. White. T. Au. I. M. E., vol. 4, p. 36. 6 pages. I.
- BUDDLES FOR COARSE AND FINE ORE IN THE TIN WORKS OF YUNNAN DISTRICT, CHINA.** T. I. M. & M., vol. 19, p. 191. 1 page. I.
- THE BUDDLE AS A CONCENTRATOR OF COPPER SLIMES.** By C. T. Rice. E. & M. J., vol. 90, p. 1107. 5 columns. I.
- THE MEXICAN PLANILLAS.** E. & M. J., vol. 90, p. 353. 1 column. I.
- MEXICAN "PLANILLA" CONCENTRATOR.** By H. J. Baron. M. & M., vol. 30, p. 377. 3 columns. I.
- ORE CONCENTRATOR.** Min. & Sci. Press, vol. 22, p. 161. 1 column. I.
- CENTRIFUGAL DRY CONCENTRATOR.** Min. & Sci. Press, vol. 97, p. 608. 1 column.
- Washing Coal and Mineral**
- PROCESS OF COAL WASHING.** By S. Diescher. P. E. Soc. W. Pa., vol. 23, p. 199. 22 pages. I.
- DESCRIPTION OF WASHING (COAL) PLANTS IN OPERATION.** By W. G. Wilkins. P. E. Soc. W. Pa., vol. 23, p. 221. 20 pages. I.
- THE BITUMINOUS WASHERY AT TYLER, PENNSYLVANIA.** By E. K. Judd. E. & M. J., vol. 85, p. 457. 8 columns. I.
- THE OPERATION OF A COAL WASHERY IN COLORADO.** By W. F. Murray. E. & M. J., vol. 86, p. 1248. 9 columns. I.
- A MODERN COAL WASHERY IN NEW MEXICO.** E. & M. J., vol. 86, p. 182. $6\frac{1}{2}$ columns.
- WASHING AND COKING TESTS OF COAL AT DENVER, COLORADO.** By A. W. Belden and others. U. S. G. S., Bull. 368. 54 pages. I. 1909.
- See also **TESTING FUELS AND THEIR VALUE.**
- DAWSON COAL WASHING PLANT, NEW MEXICO.** M. & M., vol. 29, p. 91. 2 columns. I.
- A NEW COAL WASHERY IN MICHIGAN.** By Lee Fraser. E. & M. J., vol. 87, p. 993. $3\frac{1}{2}$ columns. I.
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- THE COAL-WASHING PLANT AT THE DAWSON MINE, NEW MEXICO.** M. & M., vol. 31, p. 656. $2\frac{1}{2}$ columns. I.
- ELECTRIC COAL WASHING IN SOUTH WALES.** P. C. M. & M. Soc. S. A., vol. 9, p. 281. 1 column.
- ERNEST COAL-WASHING PLANT.** M. & M., vol. 29, p. 251. 3 columns. I.
- SCAIFE AUTOMATIC TROUGH WASHER FOR COAL AND ORE.** M. & M., vol. 29, p. 328. $\frac{1}{2}$ column. I.
- See also **PREPARATION OF COAL.**
- THE LOG WASHER IN ZINC MINING.** By L. L. Wittich. M. & M., vol. 31, p. 423. 1 column. I.
- LOG WASHERS USED IN MINNESOTA FOR WASHING IRON ORE.** M. & M., vol. 29, p. 97. $3\frac{1}{2}$ columns. I.
- LOG WASHER FOR GOLD ORES.** E. & M. J., vol. 87, p. 936. 2 columns. I.
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- NEW TYPE OF WASHER FOR LOW-GRADE GOLD ORES.** By J. H. Pratt. E. & M. J., vol. 87, p. 935. 10 columns. I.
- NEW PLANT FOR WASHING IRON ORE, MESABI RANGE.** By E. K. Soper. E. & M. J., vol. 90, p. 712. $5\frac{1}{2}$ columns. I.
- WASHING FLOORS FOR TIN CONCENTRATION, YUNNAN, CHINA.** T. I. M. & M., vol. 19, p. 191. 1 page. I.

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A Washer. Min. & Sci. Press, vol. 22, p. 392. $\frac{1}{2}$ column.

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Disposal of Waste

THE DISPOSAL OF RESIDUES AT KALGOORLIE. By H. Adams. T. Au. I. M. E., vol. 13, p. 115. $13\frac{1}{2}$ pages. I.

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IMPOUNDING MILL TAILING. By H. W. MacFarren. Min. & Sci. Press, vol. 99, p. 333. 2 columns. I.

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See also **ELEVATORS.**

See also **DESCRIPTION OF DAMS AND THEIR CONSTRUCTION.**

See also **PACKING MINE WORKINGS, ETC.**

Hand Tests on Mineral

THE USE OF STANDARDS IN READING GOLD PANNINGS. By S. J. Lett. T. I. M. & M., vol. 18, p. 482. 13 pages; vol. 19, p. 597. 5 pages.

See also first volume of **INDEX**, page 82.

Classifiers and Classification

CLASSIFICATION IN THE COEUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 514. 6 columns. I.

CLASSIFICATION AT EL ORO MILL. By G. W. Brown. M. & M., vol. 29, p. 249. 2 columns.

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See also **SLIME TREATMENT.**

CLASSIFICATION BY CURRENT OF WATER: Treatment of Ores in Sardinia. T. A. I. M. E., vol. 39, p. 77. $2\frac{1}{2}$ pages. I.

DEVELOPMENT OF HINDERED SETTLING APPARATUS. By R. H. Richards. J. C. M. I., vol. 13, p. 495. 65 pages. I.

See also **THEORY OF CONCENTRATION.**

SPITZLUTTEN. By H. Leupold. P. C. M. & M. Soc. S. A., vol. 5, p. 239. $3\frac{1}{2}$ columns. I.

CLASSIFIERS IN ORE DRESSING. Min. & Sci. Press, vol. 20, p. 66. 1 column. I.

- THE WILSON HYDRAULIC SEPARATOR.** P. C. M. & M. Soc. S. A., vol. 8, p. 176. 2 columns. I.
- THE MERRILL CLASSIFIER.** E. & M. J., vol. 87, p. 808. $\frac{1}{2}$ column. I.
- THE BLANC TURBO-CLASSIFIER.** E. & M. J., vol. 87, p. 500. $2\frac{1}{2}$ columns. I.
- THE CHAPMAN CLASSIFIER.** E. & M. J., vol. 89, p. 917. I.
- PIPE CLASSIFIER:** Used at the Bunker Hill and Sullivan Mill. Min. & Sci. Press, vol. 100, p. 121. 2 columns. I.
- THE DORR CLASSIFIERS:** Used at the Pachuca Mills. E. & M. J., vol. 86, p. 650. $1\frac{1}{2}$ columns.
- THE SOUCHON CLASSIFIER.** E. & M. J., vol. 85, p. 1009. $1\frac{1}{2}$ columns. I.
- DIAPHRAGM CONES AND TUBE-MILLING.** By W. Neal. Min. & Sci. Press, vol. 100, p. 483. 7 columns. I.
- See also FINE CRUSHING BY MILLS.
- SAND SEPARATORS:** Unwatering Apparatus at Wolverine Mill. E. & M. J., vol. 88, p. 72. 1 column. I.
- See also SAND TREATMENT.
- See also FINE CRUSHING BY MILLS.
- Slimes and Their Treatment**
- THE ELEMENTS OF SLIME CONCENTRATION.** By W. McDermott. T. I. M. & M., vol. 19, p. 400. 31 pages. I.
- SLIME TREATMENT.** By A. M. Nicholas. Min. & Sci. Press, vol. 95, p. 583. 1 column. I.
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- TREATMENT OF ORE SLIME.** By A. F. Crosse. P. C. M. & M. Soc. S. A., vol. 10, p. 172. 4 columns. I.
- TREATMENT OF SLIME.** P. C. M. & M. Soc. S. A., vol. 10, p. 408. 5 columns. D.
- TREATMENT OF SLIMES.** By W. B. Gray. T. A. I. M. E., vol. 5, p. 138. $4\frac{1}{2}$ pages.
- TREATMENT OF SLIME.** By H. C. Nichols. Min. Mag., London, vol. 1, p. 221. $6\frac{1}{2}$ columns. I.
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- See also THEORY OF CONCENTRATION.
- SLIME SETTLEMENT.** E. & M. J., vol. 86, p. 854. $1\frac{1}{2}$ columns.
- CLASSIFICATION OF SLIMES.** Min. & Sci. Press, vol. 101, p. 206. $3\frac{1}{2}$ columns.
- DEWATERING SLIMES.** Min. & Sci. Press, vol. 101, p. 208. $5\frac{1}{2}$ columns. I.
- SLIME SETTLER OR DEWATERER.** By R. E. Huntley. M. & M., vol. 31, p. 339. $1\frac{1}{2}$ columns.
- See also CLASSIFIERS AND CLASSIFICATION.
- VANNERS FOR TREATING SLIMES.** T. A. I. M. E., vol. 40, p. 517. $21\frac{1}{2}$ pages. I.
- SLIME TREATMENT BY BELT-TABLES IN SARDINIA.** T. A. I. M. E., vol. 39, p. 86. $1\frac{1}{2}$ pages. I.
- See also CONCENTRATORS, TABLES, ETC.
- A METHOD OF SETTLING SLIMES, AS APPLIED TO THEIR SEPARATION FROM SOLUTION IN CYANIDE TREATMENT.** By H. G. Nichols. T. I. M. & M., vol. 17, p. 293. 38 pages. I.
- See also CYANIDING OF ORES.
- STATIONARY AND MOVING SURFACES FOR SLIME CONCENTRATION.** T. I. M. & M., vol. 19, p. 401. 4 pages.
- THE JAMES SLIMER.** By M. T. Hoster. E. & M. J., vol. 86, p. 1149. $1\frac{1}{2}$ columns. I.

TABLES OR SAND JIGS. E. & M. J., vol. 85, p. 1041. 1 column.

See also CONCENTRATORS, TABLES, ETC., JIGS AND JIGGING, and SAND TREATMENT.

GOLD SLIMES TREATMENT: Filtering. E. & M. J., vol. 87, p. 902. 2 columns. I.

See also CYANIDING OF ORES.

SLIME TREATMENT AT BROKEN HILL, NEW SOUTH WALES. E. & M. J., vol. 87, p. 939. $\frac{1}{2}$ column.

SLIME TREATMENT AT KALGOORLIE. By M. W. Von Bernwitz. Min. & Sci. Press, vol. 95, p. 743. 2 columns. I.

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SLIME TREATMENT AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 571. 1 column.

SLIME TREATMENT AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 496. 3 columns. I.

SLIME TREATMENT AT TONOPAH, NEVADA. E. & M. J., vol. 87, p. 596. 1 column.

SLIME TREATMENT AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89, p. 568. $1\frac{1}{2}$ columns.

SLIME TREATMENT IN THE GUANAJUATO CYANIDE MILLS. E. & M. J., vol. 86, p. 998, 2 columns; p. 1001, $1\frac{1}{2}$ columns.

SLIME CONCENTRATING AT THE PINGUICO MILL, MEXICO. E. & M. J., vol. 85, p. 705. $2\frac{1}{2}$ columns.

See also CYANIDING OF ORES.

SLIME TREATMENT AT DOE RUN, MISSOURI. E. & M. J., vol. 89, p. 611. 1 column.

RECLAIMING ZINC-LEAD FINES. By L. L. Wittich. M. & M., vol. 31, p. 131. 1 column. I.

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MEASUREMENT OF PULP AND TAILING. By W. J. Sharwood. Min. Mag., London, vol. 1, p. 226, 8 columns, I.; p. 297, 16 columns, D.

See also CONCENTRATORS, TABLES, BUDDLES, ETC.

See also FINE CRUSHING BY MILLS.

See also COST OF CYANIDING.

See also CYANIDING GOLD, ETC., and COST OF MILLING.

Sand Treatment

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TREATMENT OF SANDS AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89, p. 567. 2 columns.

SAND TREATMENT AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1276. $1\frac{1}{2}$ columns.

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See also CLASSIFIERS AND CLASSIFICATION and SLIMES AND THEIR TREATMENT.

See also CYANIDING GOLD, ETC.

Dry Concentration

THE HUNGARIAN DRY WASHER FOR TREATING DRY PLACERS. Min. & Sci. Press, vol. 97, p. 360. 1 column. I.

DRY-PLACER MACHINES. By G. M. Peterson. Min. & Sci. Press, vol. 101, p. 639. $1\frac{1}{2}$ columns.

DRY-WASHING FOR PLACER-GOLD IN SONORA, MEXICO. By J. V. Richards. T. A. I. M. E., vol. 41, p. 797. 6 pages. I.

DRY PLACER MINING MACHINES. By E. B. Wilson. M. & M., vol. 31, p. 589. $4\frac{1}{2}$ columns. I.

See also AURIFEROUS GRAVELS, PROSPECTING, and HYDRAULIC MINING.

DRY-GOLD WASHERS. M. & M., vol. 31, p. 229. 3 columns. I.

THE BEHREND DRY CONCENTRATOR. E. & M. J., vol. 85, p. 1294. 2 columns. I.

See also CONCENTRATORS, TABLES, ETC.

Salt Making

SALT: Its History, Occurrence and Manufacture. By A. A. Hayard. J. M. Soc. N. S., vol. 11, p. 99. 18 pages.

SALT: Historically, Statistically, and Economically; New Improved American Salt Manufacture. By R. Thomassy. Min. Mag., vol. 9, p. 438. 3½ pages.

HISTORY OF SALT MAKING. By E. W. Parker. U. S. G. S., 18th Ann. Rept., pt. 5. 24 pages. 1896-97.

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PURIFYING ROCK SALT BY FUSION. E. & M. J., vol. 86, p. 564. ¼ column.

SALT-MAKING PROCESSES IN THE UNITED STATES. By T. M. Chatard. U. S. G. S., 7th Ann. Rept., pp. 491-535. 1885-86. I.

SALT PRODUCTION WITH EXHAUST STEAM. By N. B. Beasley. E. & M. J., vol. 87, p. 1150. 1½ columns.

NOTES ON THE EVAPORATED SALT INDUSTRY OF KANSAS. By C. M. Young. E. & M. J., vol. 88, p. 558. 10½ columns. I.

THE ROCK SALT MINING INDUSTRY IN KANSAS. By S. Ainsworth. E. & M. J., vol. 88, p. 454. 7½ columns. I.

See also **METHODS OF MINING, and MINING THICK AND MASSIVE DEPOSITS, also COST OF MILLING.**

Practice in Milling Ores

ORE DRESSING IN THE UNITED STATES AND MEXICO. By H. A. Guess. E. & M. J., vol. 88, p. 864, 12 columns, D.; p. 966, 11 columns, I., D.

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See also **DISPOSAL OF WASTE.**

THE MECHANICAL PREPARATION OF ORES IN SARDINIA. By E. Ferraris. T. A. I. M. E., vol. 39, p. 72. 25½ pages. I.

CONCENTRATING MIXED ORES AT ROSAS, SARDINIA. By U. Coppa. E. & M. J., vol. 85, p. 943. 10 columns. I.

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See also **OCCURRENCE OF ASBESTOS.**

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THE OHIO CONCENTRATOR. By L. A. Palmer. Min. & Sci. Press, vol. 101, p. 301. 7½ columns. I.

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CONCENTRATION AT THE BUTTE REDUCTION WORKS. By A. H. Wethey. E. & M. J., vol. 88, p. 415. 3½ columns. I.

- EXPERIMENTAL MILL OF THE NEVADA CONSOLIDATED COPPER COMPANY.** By M. L. Requa. *Min. & Sci. Press*, vol. 97, p. 90. 9 columns. Tables.
- DRESSING OF ORES AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.** *T. Au. I. M. E.*, vol. 11, p. 99. 4 pages.
- PREPARATION OF DIAMONDS AT THE DE BEERS MINES.** *P. C. M. & M. Soc. S. A.*, vol. 7, p. 228. 2½ columns.
- PROGRESS IN THE TREATMENT OF GOLD ORE.** By A. James. *Min. & Sci. Press*, vol. 96, p. 41. 3½ columns.
- TREATMENT OF THE BANKET DEPOSITS, SOUTH AFRICA.** *T. Au. I. M. E.*, vol. 3, p. 84. 5 pages. I.
- ANALYSIS OF MINE AND MILL PRACTICE ON THE RAND.** By E. M. Weston. *E. & M. J.*, vol. 89, p. 169, 14 columns, I.; p. 267, 10½ columns, I.
- DESCRIPTION OF ORE TREATMENT AT THE GIANT MINE, HARTLEY DISTRICT, RHODESIA.** By R. C. H. Cooke. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 152. 8½ columns. I.
- THE TREATMENT OF THE GOLD ORES OF HOG MOUNTAIN, ALABAMA.** By T. H. Aldrich. *T. A. I. M. E.*, vol. 39, p. 578. 6 pages.
- PROGRESS IN ORE TREATMENT AT KALGOORLIE.** By M. W. Von Bernwitz. *Min. & Sci. Press*, vol. 100, p. 926. 5½ columns.
- NOTES ON THE WAIHI ORE TREATMENT.** By R. Stokes. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 10, 8 columns, I.; p. 53, 3 columns; p. 121, 1 column; p. 209, ½ column.
- THE TREATMENT OF THE AURIFEROUS SULPHIDE ORES OF KALGOORLIE.** By F. Moss. *T. Au. I. M. E.*, vol. 8, pt. 1, p. 40. 27 pages.
- MILLING AND TREATMENT OF AURIFEROUS ORES IN NEW ZEALAND.** By H. A. Gordon. *T. Au. I. M. E.*, vol. 9, p. 206. 18 pages.
- THE TREATMENT OF CASSILIS ORE, EAST GIPPSLAND, VICTORIA, AS CARRIED ON BY THE CASSILIS MINING COMPANY, N. L.** By W. Aplin. *T. Au. I. M. E.*, vol. 9, p. 224. 10 pages. I. D.
- TREATMENT OF SULPHIDE ORES IN VICTORIA.** By S. Radcliff and J. Druermann. *Min. & Sci. Press*, vol. 99, p. 367. 3 columns.
- MILLING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Wolcott. *E. & M. J.*, vol. 87, p. 439. 10 columns. I.
- SCHEMES OF CONCENTRATION AT COBALT.** *M. & M.*, vol. 31, p. 303. 9 columns. I.
- CONCENTRATION AT COBALT, ONTARIO.** By G. E. Sancton. *M. & M.*, vol. 29, p. 200. 4½ columns. I.
- METHODS OF CONCENTRATION AT COBALT, ONTARIO.** By G. E. Sancton. *J. C. M. I.*, vol. 11, p. 340. 8 pages.
- HYDROMETALLURGICAL OPERATIONS AT COBALT.** By J. Tyssowski. *E. & M. J.*, vol. 90, p. 1253. 15½ columns. D.
- MILLING IN THE CRIPPLE CREEK DISTRICT, COLORADO.** By S. A. Worcester. *E. & M. J.*, vol. 87, p. 956. 5½ columns.
- See also **WASHING COAL AND MINERAL PRACTICE AT THE CAMP BIRD MILL.** *Min. & Sci. Press*, vol. 97, p. 669. 1½ columns.
- SEPARATION OF MIXED SULPHIDES AT CHARCAS, SAN LUIS POTOSI.** By R. C. Canby. *E. & M. J.*, vol. 85, p. 698. 5 columns.
- SOME FEATURES OF SILVER ORE TREATMENT IN MEXICO.** By W. A. Caldecott. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 203, 6½ columns; p. 266, 7 columns; p. 352, 2 columns; p. 384, 4 columns; vol. 19, p. 10, 7 columns; p. 97, 1½ columns.
- RIO PLATA MINE AND MILL, WESTERN CHIHUAHUA.** By H. J. Baron. *E. & M. J.*, vol. 87, p. 147. 14 columns. I.

- MILLING GOLD AND SILVER ORES AT TAJO ROSARIO, MEXICO. T. A. I. M. E., vol. 41, p. 333. 5 pages. I.
- MILLING AND CYANIDE PRACTICE AT EL ORO, MEXICO. By C. T. Rice. E. & M. J., vol. 87, p. 683. 23 columns. I.
- THE DOS ESTRELLAS MILL. Min. & Sci. Press, vol. 96, p. 197. 3 columns. I.
- MILLING AND CYANIDE PRACTICE, SAN PROSPERO MILL, GUANAJUATO. By J. S. Butler. Min. & Sci. Press, vol. 97, p. 130. 5 columns. D.
- See also CYANIDING ORES.
- METHOD OF CONCENTRATION AT THE GRANADENA MINES, MEXICO. Min. & Sci. Press, vol. 97, p. 397. 3½ columns. Flow-sheet.
- SAN YGNACIO MINE AND MILL, CHIHUAHUA, MEXICO. By O. Perogallo. E. & M. J., vol. 88, p. 1263. 6½ columns. I.
- MILL OF THE MONTEZUMA MINES, COSTA RICA. E. & M. J., vol. 90, p. 715. 6 columns.
- THE SAN RAFAEL MILL AT PACHUCA. By M. R. Lamb. E. & M. J., vol. 86, p. 325. 3 columns.
- JESU'S MARIA AND FLORES MILLS, GUANAJUATO. By C. T. Rice. E. & M. J., vol. 86, p. 615. 13 columns. I.
- HACIENDA BUBURON, AN OLD MEXICAN SILVER MILL. By M. R. Lamb. E. & M. J., vol. 86, p. 663. 6 columns. I.
- THE NEW ESPERANZA MILL AT EL ORO, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 760. 5 columns. I.
- MINING AND MILLING AT STOCKTON, UTAH. By Robt. B. Brinsmade. E. & M. J., vol. 85, p. 611. 6 columns. I.
- BOSTON SUNSHINE MILL, UTAH. By G. W. Wood. Min. & Sci. Press, vol. 99, p. 295. 2½ columns. I.
- MILLS AND MILLING AT RAWHIDE, NEVADA. E. & M. J., vol. 87, p. 347. 4½ columns. I.
- WORKING OF ORES AT THE AUBURN MILL, NEVADA. Min. & Sci. Press, vol. 22, p. 248. 2½ columns.
- YELLOW JACKET MILL, COMSTOCK LODGE. By W. Symmes. Min. & Sci. Press, vol. 97, p. 157. 3½ columns. I.
- THE BUTTERS SLIME-FILTER AT THE CYANIDE PLANT OF THE COMBINATION MINES COMPANY, GOLDFIELD, NEVADA. By M. R. Lamb. T. A. I. M. E., vol. 38, p. 200. 10 pages. I.
- See also CYANIDING OF ORES.
- THE GOLDFIELD CONSOLIDATED 600-TON MILL. By P. E. Barbour. E. & M. J., vol. 86, p. 467. 22½ columns. I.
- MILLING PRACTICE IN NEVADA GOLDFIELD REDUCTION WORKS. By E. S. Leaver. Min. & Sci. Press, vol. 97, p. 254. 2½ columns. I.
- TREATMENT OF SULPHIDE ORES AT GOLDFIELD, NEVADA: Milling Process. Min. & Sci. Press, vol. 96, p. 841. 8 columns. I. Flow-sheet.
- GOLDFIELD MILL IMPROVEMENTS. Min. & Sci. Press, vol. 99, p. 825. 1 column.
- EQUIPMENT AND PRACTICE AT FLORENCE-GOLDFIELD MILL. By H. G. Morris. E. & M. J., vol. 89, p. 365. 9½ columns. I.
- MILLING AT COMBINATION MILL, GOLDFIELD, NEVADA. By M. R. Lamb. M. & M., vol. 29, p. 209. 1 column. I.
- THE COMBINATION MINE. By E. A. Collins. Min. & Sci. Press, vol. 95, p. 397. 4½ columns, I.; p. 435, 6½ columns, I.
- CONCENTRATION PRACTICE AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 494. 8½ columns. I.
- THE DESERT MILL, MILLERS, NEVADA. By A. R. Parsons. Min. & Sci. Press, vol. 95, p. 494. 8½ columns. I.

- MILLING PLANT OF THE MONTANA-TONOPAH MINING COMPANY.** By G. H. Rotherham. *Min. & Sci. Press*, vol. 97, p. 324. 7½ columns. I.
- TONOPAH EXTENSION MILL.** By J. G. Kirchen. *Min. & Sci. Press*, vol. 100, p. 522. 4 columns.
- NEW MILL OF THE TONOPAH EXTENSION MINING COMPANY.** E. & M. J., vol. 89, p. 1066. 3 columns. I.
- MILLING AT TONOPAH, NEVADA.** E. & M. J., vol. 87, p. 595. 6 columns. I.
- MINING AND REDUCTION OF ELY, NEVADA, ORES.** By R. L. Herrick. *M. & M.*, vol. 29, p. 167. 11½ columns. I.
- PITTSBURG SILVER PEAK MILL, NEVADA.** By H. Hanson. *M. & M.*, vol. 29, p. 569. 8½ columns. I.
- MECHANICAL TREATMENT OF GOLD ORE.** By W. J. Adams. *Min. & Sci. Press*, vol. 95, p. 374. 1½ columns.
- See also **AMALGAMATION.**
- IMPROVEMENTS IN THE HOMESTAKE MILL.** *Min. & Sci. Press*, vol. 95, p. 812. 1 column. I.
- SIMMER DEEP AND JUPITER REDUCTION WORKS.** By J. E. Thomas. *Min. & Sci. Press*, vol. 99, p. 396. 6½ columns. I.
- CONCENTRATION OF FLAKE GRAPHITE.** By F. D. Chester. E. & M. J., vol. 88, p. 824. 3½ columns.
- See also **OCCURRENCE OF GRAPHITE.**
- UTILIZATION OF IRON SANDS.** *Min. & Sci. Press*, vol. 20, p. 355. 1 column.
- See also **SAND TREATMENT.**
- TREATMENT OF THE BRUCE IRON ORE, ONTARIO.** J. C. M. I., vol. 10, p. 160. 2 pages.
- CONCENTRATION OF MESABI ORE.** By H. H. Stock. *M. & M.*, vol. 29, p. 97. 3½ columns. I.
- MILLING PRACTICE AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA.** E. & M. J., vol. 89, p. 422. 4 columns. I. Flow-sheet.
- MINE AND MILL OF LE ROI No. 2, LTD., ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen. E. & M. J., vol. 89, p. 176. 5½ columns. I.
- TABLE CONCENTRATION IN THE CŒUR D'ALENE DISTRICT.** *Min. Mag.*, London, vol. 2, p. 444. 4 columns. I.
- MILLING OF LEAD-SILVER ORE.** By G. Caetani. *Min. Mag.*, London, vol. 2, p. 361, 14 columns, I.; p. 441, 12 columns, I.; p. 48, 16 columns, I.
- ORE DRESSING IN THE CŒUR D'ALENE DISTRICT.** By E. S. Wiard. E. & M. J., vol. 88, p. 1055, 13½ columns, I.; p. 1104, 16 columns, I.; p. 1205, 21 columns, I.
- TREATMENT OF ORE IN THE CŒUR D'ALENE LEAD REGION.** *Min. & Sci. Press*, vol. 96, p. 626. 3 columns. I.
- MILLING IN THE CŒUR D'ALENE.** By G. Huston. *Min. & Sci. Press*, vol. 96, p. 232. 1½ columns.
- NEW CONCENTRATOR OF THE BUNKER HILL AND SULLIVAN.** By G. Caetani. *Min. & Sci. Press*, vol. 100, p. 120. 5½ columns. I.
- ORE DRESSING IN THE CŒUR D'ALENE DISTRICT.** By E. S. Wiard. E. & M. J., vol. 89, p. 20, 23 columns, I.; p. 375, 7½ columns, I.; p. 514, 13½ columns, I.; p. 570, 7½ columns; p. 822, 10 columns; p. 875, 7½ columns, I.; p. 967, 8½ columns, I.
- CONCENTRATING DIFFICULT LEAD ORES AT BROKEN HILL, NEW SOUTH WALES.** By G. W. Williams. E. & M. J., vol. 87, p. 939. 6 columns.
- ORE TREATMENT AT THE BROKEN HILL PROPRIETARY MINE.** By G. D. Delprat. *T. Au. I. M. E.*, vol. 12, p. 1. 28 pages. I.
- CONCENTRATION AT THE BLUE BELL MINE, BRITISH COLUMBIA.** E. & M. J., vol. 88, p. 785. 2½ columns.
- THE AMERICAN MILL AT ORONOGO, JOPLIN DISTRICT.** By Doss Brittain. E. & M. J., vol. 85, p. 1039. 6½ columns. I.

- IMPROVEMENTS IN THE ORONOGO CIRCLE MILL No. 5.** By O. Ruhl. E. & M. J., vol. 86, p. 993. 5 columns. I.
- RECLAIMING ZINC AND LEAD ORES.** By L. L. Wittich. M. & M., vol. 30, p. 503. 4½ columns. I.
- ORE DRESSING IN THE JOPLIN DISTRICT.** M. & M., vol. 30, p. 383. 3½ columns. I.
- SOUTHEAST MISSOURI MINING.** By S. S. Clarke. Min. & Sci. Press, vol. 100, p. 528. 2 columns.
- MILLING AT DOE RUN, SOUTHEAST MISSOURI.** E. & M. J., vol. 89, p. 610. 2 columns. I.
- THE MINING AND MILLING OF SILVER-LEAD AND ZINC ORES AT PIERREFITTE MINES, FRANCE.** By W. W. Van Ness. T. A. I. M. E., vol. 39, p. 369. 22½ pages. I.
- CONCENTRATION OF SILVER-LEAD ORES.** By V. F. S. Low. T. Au. I. M. E., vol. 10, p. 197. 16 pages. I.
- CONCENTRATION OF LEAD-SILVER ORES.** By V. F. S. Low. T. Au. I. M. E., vol. 11, p. 164. 12 pages. I.
- DRESSING OF ORES: A Freiberg Process.** Min. & Sci. Press, vol. 20, p. 2, 1½ columns; p. 66, 1½ columns, I.; p. 130, 1 column, I.
- WET CONCENTRATION AT MIDVALE, UTAH.** By L. A. Palmer. M. & M., vol. 30, p. 517. 5½ columns. I.
- CONCENTRATION AT FREIBERG, GERMANY.** E. & M. J., vol. 87, p. 988. 1½ columns.
- METHOD OF MILLING LEAD ORES AT THE CUMBERLAND MINES, ENGLAND.** E. & M. J., vol. 85, p. 299. 2 columns. I.
- MILLING FLORIDA PHOSPHATES.** E. & M. J., vol. 87, p. 490. 8 columns. I.
- See also **OCCURRENCE OF PHOSPHATES.**
- TIN-DRESSING.** By H. W. Hutchin. Min. Mag., London, vol. 2, p. 295. 3 columns.
- NOTES ON TIN DRESSING.** By H. W. Hutchin. T. I. M. & M., vol. 18, p. 69. 38½ pages. I.
- NOTES ON TIN ORE DRESSING AT SOUTH CROFTY.** E. & M. J., vol. 87, p. 651. 4 columns.
- TIN-DRESSING AT STANLEY HILLS, NORTH QUEENSLAND.** By W. L. Cleland. T. Au. I. M. E., vol. 12, p. 154. 10 pages. I.
- CONCENTRATION OF TIN ORES AT CHOROLQUE, BOLIVIA.** Min. Mag., vol. 4, p. 214. 2 columns. D.
- TIN MINING AND MILLING IN THE BOLIVIAN ANDES.** By G. W. Dean. E. & M. J., vol. 90, p. 1053. 5½ columns. I.
- ZINC MINING IN NEW JERSEY.** By H. B. Kummel. E. & M. J., vol. 87, p. 11. 1½ columns.
- THE GREAT BOULDER PERSEVERANCE MILL.** Min. Mag., vol. 4, p. 388. ½ column. Flow-sheet.
- CONCENTRATION AT CATAMA, CHILE.** By F. A. Sundt. M. & M., vol. 31, p. 605. 3½ columns.

CONCRETE, MORTARS, AND PLASTERS

Cement and Concrete: Their Properties and Uses

- LIME IN CEMENT.** Min. & Sci. Press, vol. 95, p. 282. ½ column.
- PORTLAND CEMENT CALCULATIONS.** M. & M., vol. 31, p. 25. 1½ columns.
- PORTLAND CEMENT.** By J. L. Howard. Min. & Sci. Press, vol. 98, p. 630. 8½ columns.
- PORTLAND CEMENT.** Min. & Sci. Press, vol. 96, p. 170. ½ column.
- THE MANUFACTURE OF PORTLAND CEMENT.** By W. M. Kinney. P. E. Soc. W. Pa., vol. 25, p. 103. 36 pages. I.
- NOTES ON THE BRITISH STANDARD SPECIFICATION FOR PORTLAND CEMENT, AND OBSERVATIONS ON THE**

- USE OF WATER AND CONCRETE IN STRUCTURAL WORK.** By W. Watts. T. I. M. E., vol. 37, p. 318. 13 pages.
- CALCULATING THE HEAT BALANCE OF LIME KILNS.** By Robt. Schorr. E. & M. J., vol. 85, p. 613. 6 columns.
- CHARACTERISTIC TESTS OF CEMENT.** By L. L. Kimball U. S. G. S., Mineral Resources, 1904.
- COMBUSTION IN CEMENT-BURNING.** By B. E. Eldred. T. A. I. M. E., vol. 41, p. 479, 10½ pages; p. 905, 3½ pages.
- PORTLAND CEMENT MORTARS AND THEIR CONSTITUENT MATERIALS; Results of Tests Made at the Structural-Materials Laboratories, Forest Park, St. Louis, Missouri.** By R. L. Humphrey. U. S. G. S., Bull. 331. 130 pages. I. 1908.
- ON THE EMPLOYMENT OF RUBBLE BÉTON OR CONCRETE IN WORKS OF ENGINEERING AND ARCHITECTURE.** By J. Rennie. Min. Mag., vol. 10, p. 60. 4 pages.
- TESTS OF CONCRETE.** By R. L. Humphrey. M. & M., vol. 29, p. 159. 1½ columns.
- THE BOND BETWEEN CONCRETE AND STEEL.** By T. L. Condrón. J. W. Soc. E., vol. 12, p. 100. 17½ pages. I.
- DEFORMED BARS vs. ROUND RODS ANCHORED FOR REINFORCED CONCRETE.** By J. H. Toupet. P. E. Soc. W. Pa., vol. 25, p. 505. 35 pages. I.
- REINFORCED CONCRETE TRESTLES FOR RAILWAYS.** By C. H. Cartlidge. J. W. Soc. E., vol. 15, p. 543. 30 pages. I.
- BONDING NEW TO OLD CONCRETE.** P. C. M. & M. Soc. S. A., vol. 10, p. 156. ½ column.
- STRENGTH OF CONCRETE JOINTS.** By J. L. Miner. P. E. Soc. W. Pa., vol. 24, p. 471. 20½ pages. D.
- STRENGTH OF CONCRETE BEAMS.** By R. L. Humphrey. U. S. G. S., Bull. 344. 59 pages. 1908.
- NOTES ON CONCRETE CONSTRUCTION.** By R. A. Cummings. P. E. Soc. W. Pa., vol. 26, p. 159. 28 pages. I.
- FORMS FOR CONCRETE.** By J. D. Stevenson. P. E. Soc. W. Pa., vol. 26, p. 270. 46 pages. I.
- HOW TO PREVENT FAILURE IN CONCRETE CONSTRUCTION.** By W. Michaelis. J. W. Soc. E., vol. 12, p. 455. 18 pages.
- CONCRETE BOATS AND BARGES.** Min. & Sci. Press, vol. 97, p. 95. ½ column.

Use of Concrete in Mines

- FILBERT MINE CONCRETE-LINED SHAFTS.** By A. F. Allard and H. S. Patterson. M. & M., vol. 30, p. 557. 17 columns. I.
- SINKING CONCRETE SHAFTS IN QUICKSAND.** By F. W. Adgate. E. & M. J., vol. 88, p. 1159. 9½ columns. I.
- CONCRETE LININGS IN SHAFT SINKING.** By R. H. Rowland. E. & M. J., vol. 88, p. 359. 7 columns. I.
- CONCRETE SHAFT LINING.** Min. & Sci. Press, vol. 97, p. 745. 6½ columns. I.
- BRIER HILL CONCRETE-LINED SHAFT, VULCAN, MICHIGAN.** By W. Kelly. E. & M. J., vol. 89, p. 970. 6 columns. I.
- CONCRETE SHAFT LININGS.** M. & M., vol. 29, p. 563. 6½ columns. I.
- CONCRETE SHAFT LINING.** Min. & Sci. Press, vol. 95, p. 183. 4½ columns. I.
- CONCRETE SHAFT LININGS.** T. L. S. M. I., vol. 15, p. 92. 4½ pages. I.
- THE BRIER HILL CONCRETE-LINED SHAFT.** By W. Kelly. T. L. S. M. I., vol. 14, p. 140. 6 pages. I.
- CONCRETE LINED SHAFTS SUNK THROUGH QUICKSAND.** T. L. S. M. I., vol. 14, p. 55. 16 pages. I.

- CONCRETE SHAFT LINING. M. & M., vol. 31, p. 516. 10 columns. I.
- METHOD OF SINKING AND CONCRETING THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 558. 4 columns. I.
- SINKING REINFORCED CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate. T. L. S. M. I., vol. 14, p. 55. 16 pages. I.
- CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate. M. & M., vol. 30, p. 271. 5½ columns. I.
- SINKING A REINFORCED CONCRETE MINE SHAFT. By A. H. Fay. E. & M. J., vol. 88, p. 599. 4½ columns. I.
- SINKING A REINFORCED CONCRETE SHAFT. By L. L. Brown. Min. & Sci. Press, vol. 97, p. 745. 6½ columns. I.
- STEEL FORMS FOR CONCRETE SHAFT LINING. M. & M., vol. 30, p. 557. 1 column.
- STEEL FORMS USED IN LINING THE BRIER HILL MINE WITH CONCRETE. E. & M. J., vol. 89, p. 971. 1 column. I.
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- SINKING IN WET GROUND BY INJECTING CONCRETE: Cementation. By J. Lombois. E. & M. J., vol. 87, p. 653. 8½ columns. I.
- THE USE OF CEMENT FOR TUBBING IN DEEP SHAFTS. E. & M. J., vol. 86, p. 427. 1 column.
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- NORTH LAKE CONCRETE SHAFT AND FOUNDATION FOR STEEL HEADFRAME. E. & M. J., vol. 88, p. 722. 1 column. I.
- REINFORCED CONCRETE FOUNDATIONS FOR STAMP BATTERIES. By S. J. Truscott. T. I. M. & M., vol. 18, p. 25. 12 pages. I.
- See also STAMP MILL PRACTICE.
- CONCRETE ENGINE FOUNDATION. By A. H. Shaw. M. & M., vol. 30, p. 170. 1½ columns. I.
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- CONCRETE IN THE HUDSON RIVER TUNNELS. By W. M. Torrance. J. W. Soc. E., vol. 13, p. 632. 30 pages. I.
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- AMOUNT OF CONCRETE USED IN LINING THE CONCRETE SHAFT AT THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 565. Table.
- METHOD OF CONCRETING SHAFTS. M. & M., vol. 30, p. 633. 2 columns. I.
- USE OF CONCRETE IN THE CLONAN SHAFT, MINEVILLE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 85, p. 111. 1½ columns.
- CONCRETE FOR SHAFT TRACKS. P. C. M. & M. Soc. S. A., vol. 10, p. 415. ½ column.
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- THE USE OF CONCRETE FOR MINE SUPPORT. By W. R. Crane. T. I. M. E., vol. 37, p. 560. 26 pages. I.
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- CONCRETE MINE PROPS USED IN GERMANY. E. & M. J., vol. 88, p. 414. 1 column. I.
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- CAPACITY OF CIRCULAR VATS PER FOOT OF DEPTH. By W. A. Caldecott. Min. & Sci. Press, vol. 101, p. 412. Table.

A CONCRETE TANK TO STORE TAILING. Min. & Sci. Press, vol. 95, p. 337. 1½ columns. I.

CEMENT CONCRETE VATS AND TANKS. By A. Mayer. M. & M., vol. 31, p. 364. ½ column.

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See also **TANKS FOR MINING PURPOSES.**

See also **COST OF CONCRETE-SHAFT LINING.**

See also **KINDS OF SUPPORT, TIMBER, ETC.**

See also **MINE AND MILL CONSTRUCTION AND COST OF SUPPORT.**

CONVEYORS FOR MINERAL AND COAL

Kinds of Conveyors, Operation, Etc.

KEYSTONE RIVETLESS CONVEYOR CHAIN. M. & M., vol. 30, p. 187. 2 columns. I.

A NEW STEEL BELT CONVEYOR IN USE IN SWEDEN. By A. Gradenwitz. E. & M. J., vol. 90, p. 455. 9 columns. I.

ROBINS BELT-CONVEYOR SYSTEM FOR HANDLING COAL. T. I. M. E., vol. 36, p. 643. 5 pages. I.

Conveyors Underground

SHAKING CHUTES IN RAND MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 281. 1½ columns. I.

SWINGING CHUTES FOR COAL MINES. E. & M. J., vol. 87, p. 362. 3½ columns. I.

CONVEYOR SYSTEM AT THE NEW KLEINFONTEIN MINE. By E. J. Way. E. & M. J., vol. 85, p. 888. 13½ columns. D.

UNDERGROUND CONVEYORS AT THE KLEINFONTEIN MINE. By E. J. Way. E. & M. J., vol. 86, p. 715. 3½ columns.

CONVEYORS IN COAL MINES. E. & M. J., vol. 90, p. 1069. 2 columns. I.

CONVEYOR FOR HANDLING COAL IN THE MINE, ENGLAND. E. & M. J., vol. 87, p. 798. 1½ columns.

See first volume of Index.

COSTS OF MINING, MILLING, AND METALLURGICAL OPERATIONS

Cost Keeping

COST-KEEPING IN MINES. Min. & Sci. Press, vol. 97, p. 119. 1½ columns.

CONCERNING COSTS. By G. Huston. Min. & Sci. Press, vol. 94, p. 630. 2½ columns.

ANALYSIS OF WORKING EXPENDITURE. The Witwatersrand Goldfield, p. 433.

GATHERING ENGINEERING COST DATA. By H. P. Gillette. Sch. Mines Quart., vol. 25, p. 358. 10 pages.

THE ART OF COST ESTIMATING, CAUSES OF UNDERESTIMATES, AND AMBIGUITY OF SPECIFICATIONS. By H. P. Gillette. Earthwork and Its Cost. Introduction.

COMPUTING EXPENSE AND PROFITS IN MINING: A Decision. E. & M. J., vol. 76, p. 860.

DETERMINATION OF MINING COSTS. E. & M. J., vol. 75, p. 213.

COST PER TON AS A BASIS FOR MINE VALUATION. By R. G. Brown. E. & M. J., vol. 76, p. 309. 2½ columns.

ELEMENTS OF UNCERTAINTY IN ESTIMATING AVERAGE COSTS OF MINING AND REDUCTION. E. & M. J., vol. 47, p. 561. ½ column.

WORKING COSTS: Considerations and Illustrations. Min. & Sci. Press, vol. 87, p. 179. 2 columns.

REDUCING COSTS. Min. & Sci. Press, vol. 87, p. 197. ½ column.

50 COST OF MINING, MILLING, METALLURGY, ETC.

UNIFORM COST RETURNS. By W. A. Prickard. E. & M. J., vol. 76, p. 655. 1½ columns.

MINING ECONOMY. E. & M. J., vol. 19, p. 85. 1½ columns.

THEORY OF VALUE. Min. & Sci. Press, vol. 38, p. 70. 2½ columns.

CORRECT COSTS, OR THE PARALLEL COLUMN IN THE COUNTING-ROOM. Min. & Sci. Press, vol. 70, p. 395. 1½ columns.

ENGINEER'S ESTIMATES OF COSTS. E. & M. J., vol. 78, p. 464. 2 columns.

MINING COSTS: A Suggestion. By R. G. Brown. Min. & Sci. Press, vol. 92, p. 37. 2 columns.

A DECADE OF PROGRESS IN REDUCING COSTS. By C. Kirchhoff. T. A. I. M. E., vol. 29, p. 352.

DIFFICULTY IN USING MINING COSTS. Min. & Sci. Press, vol. 82, p. 199.

ECONOMIZING TIME: Costs. Min. & Sci. Press, vol. 88, p. 326.

FACTORS ENTERING INTO THE CALCULATION OF COSTS IN MINING. T. A. I. M. E., vol. 22, p. 95. 9 pages.

COST OF MINING. By R. G. Brown. E. & M. J., Mar. 23, 1905, p. 573. 2 columns.

PROFIT AND LOSS IN MINING. Col. Engr. & Met. Miner, vol. 17, p. 368.

COST (PERCENTAGE) OF SUPERINTENDENCE, INCIDENTALS AND CONTRACTOR'S PROFIT. R. R. Construction, Webb, p. 137.

CONTRACTOR'S COST-SHEET ON THE TRANSVAAL. Min. Mag., vol. 12, pp. 273, 274.

COST ACCOUNTS. Min. & Sci. Press, vol. 76, p. 372. 1½ columns.

COST ACCOUNTS OF GOLD MINING. T. A. I. M. E., Feb., 1906, p. 1327. Table.

MINE COST ACCOUNTS. E. & M. J., vol. 66, p. 363. ½ column.

SUMMARY OF CHARGES WHICH MUST BE BORNE BY A PROPERTY BEFORE IT CAN BE CALLED A MINE. E. & M. J., vol. 74, p. 344. ½ column.

See also **MINE ACCOUNTS AND BOOK-KEEPING.**

See also **MINE ORGANIZATION.**

Cost of Accidents

CATASTROPHES IN AMERICAN MINES. M. & M., vol. 30, p. 595. 4½ columns.

COST OF INJURIES TO MINERS. M. & M., vol. 31, p. 411. Table.

MONEY VALUE OF HANDS AND FINGERS. Min. & Sci. Press, vol. 70, p. 185. ½ column.

COST OF AN AIR-COMPRESSING LIFE-SAVING APPARATUS. T. F. I. M. E., vol. 13, p. 138.

ESTIMATE OF COST OF AN AVERAGE DISTRICT REFUGE CHAMBER. E. & M. J., vol. 90, p. 427. 1 column. Table.

See also **CHAMBERS OF REFUGE, and ACCIDENTS IN MINING.**

Cost of Blasting

COST OF BLASTING DOWN COAL IN SOUTHERN INDIANA. E. & M. J., vol. 90, p. 870. ½ column.

COST OF INSTALLATION OF ELECTRICAL FIRING SYSTEM IN COAL MINES. E. & M. J., vol. 87, p. 246. ½ column.

COST OF INSTALLING ELECTRICAL SHOT-FIRING SYSTEM IN COAL MINES. M. & M., vol. 29, p. 39. ½ column.

COST OF ELECTRIC SHOT FIRING. E. & M. J., vol. 89, p. 880. 1½ columns.

See also **BLASTING IN MINES, and Use of EXPLOSIVES IN MINING.**

Cost of Cyaniding

CYANIDE COSTS. Min. & Sci. Press, vol. 96, p. 803. ½ column.

- COST OF CYANIDING. Min. & Sci. Press, vol. 65, p. 204. 2 columns.
- CYANIDE COSTS. Min. & Sci. Press, vol. 97, p. 46. 1 column.
- COST OF CYANIDING ORES. E. & M. J., vol. 78, p. 954. Table.
- GENERAL MILLING AND CYANIDATION COSTS. Min. & Sci. Press, vol. 94, p. 22. Tables.
- COST OF CYANIDING ARGENTIFEROUS CONCENTRATE. E. & M. J., vol. 80, p. 109.
- COST OF CYANIDING PLANT AND TREATMENT. Min. & Sci. Press, vol. 84, p. 112, Note; vol. 85, p. 3.
- COST OF CYANIDING SULPHO-TELLURIDE ORES. E. & M. J., vol. 76, pp. 53 and 54.
- COST OF TREATING GOLD SANDS. Min. & Sci. Press, vol. 69, p. 292. 1 column.
- COST OF HANDLING SANDS IN CYANIDE VATS AT VIRGINIA CITY, NEVADA. E. & M. J., vol. 76, p. 851.
- See also SAND TREATMENT.
- COST OF TAILINGS TREATMENT. Gold Min. and Mill. W. Aus., pp. 253, 272, 273, 275, 276, 279, 281, 285, 286. Tables.
- COST PER TON OF TREATING 46,500 TONS OF TAILINGS AT THE COMSTOCK LODGE, NEVADA. T. A. I. M. E., vol. 19, p. 231.
- COST OF CYANIDING REFRACTORY TAILINGS ON THE WITWATERSRAND. T. A. I. M. E., vol. 11, p. 113. Table.
- COST OF CYANIDING AND GENERAL EXPENSES OF REWORKING AN OLD DUMP. Min. & Sci. Press, vol. 80, p. 576. Tables.
- COST OF PRECIPITATION FROM CYANIDE SOLUTIONS BY ZINC SHAVINGS AND DUST. P. C. M. & M. Soc. S. A., vol. 9, p. 223. 1 column.
- COST OF ZINC IN CYANIDING, WESTERN AUSTRALIA. Gold Min. and Mill. W. Aus., p. 255.
- COST OF CYANIDING. Gold Min. and Mill. W. Aus., p. 257.
- COST OF POTASSIUM CYANIDE AND ZINC ON THE RAND—1902. Witwatersrand Goldfields, p. 457. Table.
- See also CHEMISTRY; METHODS AND PRACTICE.
- COST OF FILTER PRESS TREATMENT. J. C. & M. Soc. S. A., vol. 3, pp. 29, 30, 31, 32, 36, 37, 40.
- COST OF FILTERING WITH THE BUTTERS FILTER. Min. & Sci. Press, vol. 94, p. 820. Tables.
- COST OF BUTTER'S FILTER OPERATION. Min. & Sci. Press, vol. 94, p. 432. Tables.
- COST OF MAINTENANCE OF FILTER AT THE NORTH STAR MINES. Min. & Sci. Press, vol. 99, p. 715. Table.
- COST OF SLIME FILTERING AT WAIHI, NEW ZEALAND. P. C. M. & M. Soc. S. A., vol. 8, p. 14. $\frac{1}{2}$ column.
- COST OF FILTER PRESSING AT THE COMBINATION MINE, GOLDFIELD, NEVADA. M. & M., vol. 27, p. 299. $\frac{1}{2}$ column.
- COST OF CYANIDING SLIMES. J. C. & M. Soc. S. A., vol. 2, p. 96. Tables.
- COST OF CYANIDING SLIMES. E. & M. J., vol. 71, p. 83.
- COST OF CYANIDING SLIMES AT THE PALMAREJO MINE, MEXICO. T. A. I. M. E., vol. 36, p. 287. Table.
- COST OF SLIME TREATMENT AT THE NORTH STAR MINES. Min. & Sci. Press, vol. 99, p. 715. Table.
- COST OF CYANIDE TREATMENT OF SLIMES AT NICARAGUA. T. I. M. & M., vol. 7, p. 66. Table.
- COST OF CYANIDING SLIMES AT THE HOMESTAKE PLANT. Min. & Sci. Press, vol. 97, p. 353. Table.
- COST OF SLIME TREATMENT AT THE HOMESTAKE SLIME-PLANT. Min. & Sci. Press, vol. 97, p. 353. Table.

52 COST OF MINING, MILLING, METALLURGY, ETC.

COST OF SLIME TREATMENT AT EL ORO MEXICO. T. A. I. M. E., vol. 37, p. 35. Tables.

See also **SLIMES AND THEIR TREATMENT.**

COST OF CYANIDING ON THE RAND. T. I. M. & M., vol. 7, p. 138. Table.

COST OF CYANIDING IN RHODESIA. Min. & Sci. Press, vol. 90, p. 138. Tables.

WORKING COST OF THE ROBINSON CYANIDE WORKS, THE RAND. Gold Mines of the Rand, p. 237. Table.

CYANIDING ON THE RAND. Gold Mines of the Rand, pp. 232, 261, 265.

COST OF CYANIDING IN RHODESIA. SOUTH AFRICA. T. I. M. E., vol. 31, p. 79. Table.

COST OF CYANIDING, SOUTH AFRICA. J. C. & M. Soc. S. A., vol. 1, pp. 262, 264, 287, 288, 290, 291, 309, 310, 311, 312, 313. Table.

COST OF MILLING AND CYANIDING IN WESTERN AUSTRALIA. E. & M. J., vol. 74, p. 541. $\frac{1}{2}$ column.

COST OF LIXIVIATING PARRAL, MEXICO. E. & M. J., vol. 47, p. 256.

COST OF ORE TREATMENT: Cyaniding, at Kalgoorlie. E. & M. J., vol. 76, p. 228. Tables.

COST OF MILLING AND CYANIDING AT KALGOORLIE. E. & M. J., vol. 80, p. 4.

COST OF CYANIDING IN WESTERN AUSTRALIA. Gold Min. and Mill. W. Aus., pp. 195, 212, 271, 272, 273, 275, 276, 279, 281, 285, 286, also Chap. 9, pp. 290-444. Tables.

CYANIDING COSTS AT CRIPPLE CREEK. M. & M., vol. 28, p. 422. Table; p. 483. Tables.

COST OF CYANIDING, COLORADO. Min. & Sci. Press, vol. 76, p. 538. Table.

COST OF CYANIDING IN SOUTHWESTERN COLORADO. Min. & Sci. Press, vol. 84, p. 254.

COST OF CYANIDING IN THE BLACK HILLS, SOUTH DAKOTA. Min. & Sci. Press, vol. 83, p. 246. Table.

COST OF CYANIDING IN THE BLACK HILLS. E. & M. J., vol. 69, p. 228.

COST OF CYANIDING IN SOUTH DAKOTA. Min. & Sci. Press, vol. 84, p. 233. Table; p. 307. Tables.

COST OF CYANIDING IN THE HOMESTAKE MILLS. Min. & Sci. Press, vol. 95, p. 22. Table.

COST OF CYANIDING AT THE HOMESTAKE MINE. Min. & Sci. Press, vol. 87, p. 269. Table; p. 270. Table; p. 271. Table.

COST OF CYANIDING AT HOMESTAKE: Comparison with Other Mills. Min. & Sci. Press, vol. 86, p. 151. Tables.

COST OF CYANIDING IN THE BLACK HILLS. E. & M. J., vol. 75, p. 373.

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CYANIDING COST AT NUSAN, KOREA. Min. & Sci. Press, vol. 100, p. 606. Table.

COST OF CYANIDE-TREATMENT OF SILVER-ORES IN MEXICO. T. A. I. M. E., vol. 35, pp. 26, 27, 28, 29, 30, 31.

COST OF CYANIDING SILVER-GOLD ORES OF THE PALMAREJO MINE, MEXICO. T. A. I. M. E., vol. 36, p. 264. Table.

COST OF CYANIDING AT THE TAJO, ROSARIO MILL, MEXICO. T. A. I. M. E., vol. 41, p. 367. Table.

COST OF CYANIDING AT PARRAL, MEXICO. Min. & Sci. Press, vol. 98, p. 489. $1\frac{1}{2}$ columns. Tables.

COST OF CYANIDING IN MEXICO. T. A. I. M. E., vol. 40, p. 767. Table.

COST OF CYANIDING IN MONTANA. Min. & Sci. Press, vol. 76, p. 642. Table.

COMPARATIVE COSTS IN CYANIDING IN THE SOUTH AND WEST. Min. & Sci. Press, vol. 88, p. 146. Table.

See also **CYANIDING GOLD AND SILVER, and PRACTICE IN MILLING ORES.**

Cost of Industrial Chemistry

COST OF INSTALLATION AND OPERATION OF SULPHURIC ACID PLANT. E. & M. J., vol. 80, p. 636.

COSTS OF BRIMSTONE VS. PYRITES FOR ACID MAKING. E. & M. J., vol. 35, p. 251. 2½ columns.

COMPARATIVE COSTS OF PRODUCING SULPHURIC ACID FROM BRIMSTONE AND PYRITES. E. & M. J., vol. 54, p. 76.

COST OF PRODUCTION OF SODIUM HYPOSULPHITE. T. A. I. M. E., vol. 20, p. 26.

COST OF PRODUCTION OF HYDROBORATE OF LIME. T. I. M. E., vol. 23, pp. 458, 459, 461, 462, 463.

MANUFACTURING COST OF VANADINITE. M. & M., vol. 26, p. 353. Table.

Cost of Chlorination

COST OF CHLORINATION OF GOLD ORES: 75 Ton Plant. Min. & Sci. Press, vol. 75, p. 573. Table.

COST OF GOLD CHLORINATION IN CALIFORNIA. Min. & Sci. Press, vol. 49, p. 54. Tables.

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COST OF CHLORINATION OF ORES. Min. & Sci. Press, vol. 74, p. 233. Table.

COST OF CHLORINATION. E. & M. J., vol. 67, p. 467.

COST OF CHLORINATION. T. A. I. M. E., vol. 15, p. 308.

COST OF BARREL CHLORINATION AT BUNKER HILL. Sch. Mines Quart., vol. 11, p. 146. 2 pages.

THE COST OF BARREL CHLORINATION. By J. E. Rothwell. E. & M. J., vol. 55, p. 269. ½ column.

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COST OF CHLORINATION AT HODSON, CALIFORNIA. Min. & Sci. Press, vol. 89, p. 139. Table.

COST OF CHLORINATING CRIPPLE CREEK ORES. E. & M. J., vol. 79, p. 795. 1½ columns.

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Cost of Development

COST OF DEVELOPMENT. The Witwatersrand Goldfields, p. 296.

COST OF DEVELOPMENT. P. C. M. & M. Soc. S. A., vol. 7, p. 8. 1½ columns.

COST OF DEVELOPMENT WORK. Min. & Sci. Press, vol. 50, p. 412. Table.

COST OF DEVELOPMENT: WINZES, RAISES, AND DRIFTING. Witwatersrand Goldfields, p. 296. 10 pages.

COST OF DEVELOPMENT IN WESTERN AUSTRALIA. Gold Min. and Mill. W. Aus., pp. 195, 197, 210, 212, 214. Tables.

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COST OF DEVELOPMENT WORK ON THE RAND. Miner's Pocket Book, Lock, p. 222. Tables.

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COST OF MINE DEVELOPMENT, RHODESIA. Min. & Sci. Press, vol. 90, p. 106. Table.

COST OF DEVELOPMENT AND EQUIPPING A MINE IN THE RAND, SOUTH AFRICA. T. I. M. & M., vol. 12, p. 275. Table.

COST OF DEVELOPING A MINE BY TURNED, CENTRAL AND SOUTHERN VERTICAL SHAFTS IN SOUTH AFRICA GOLD FIELDS. Sch. Min. Quart., vol. 21, p. 16.

COST OF OPENING AND DEVELOPING OF A DRIFT MINE. M. & M., vol. 25, p. 458. Table.

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COST OF DEVELOPMENT WORK CENTRE STAR MINING COMPANY, BRITISH COLUMBIA. Min. & Sci. Press, vol. 84, p. 33. Table.

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54 COST OF MINING, MILLING, METALLURGY, ETC.

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Cost of Drainage

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COST OF UNWATERING AN OLD MINE IN MEXICO. Min. & Sci. Press, vol. 98, p. 655. 1 column. Table.

See also **MINE DRAINAGE.**

Cost of Dams, Etc.

COST OF DAM CONSTRUCTION. Min. & Sci. Press, vol. 91, p. 154. Table.

COST OF A CAST-IRON DAM TO RESIST OUTBURST OF WATER. T. I. M. E., vol. 32, pp. 93, 94. Tables.

See also **PROTECTION IN MINING, AND INUNDATIONS IN MINES.**

COST OF CONSTRUCTING A REINFORCED CONCRETE RESERVOIR AT FORT MEADE, SOUTH DAKOTA. Eng.-Cont., vol. 27, p. 91. $8\frac{1}{2}$ columns.

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Cost of Dredging

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COST OF GOLD DREDGING AT OROVILLE, CALIFORNIA. E. & M. J., vol. 48, p. 380. Table.

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COST OF DREDGING: Types of Dredges; Cost by Dipper Dredge; Cost by Grapple Dredge; Cost by Bucket Elevator Dredge; Cost by Hydraulic Dredge; and Contract Prices of Dredging.

EARTHWORK AND ITS COST. Gillette, Chapter 16.

COST OF DREDGING FOR GOLD IN ALASKA. E. & M. J., vol. 80, p. 212. Note.

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58 COST OF MINING, MILLING, METALLURGY, ETC.

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60 COST OF MINING, MILLING, METALLURGY, ETC.

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- COST OF HAULAGE BY ELECTRIC MOTORS vs. MULES.** Miner's Pocket Book, Lock, p. 117. Tables.
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- ESTIMATED COST OF A COMPRESSED-AIR ROAD IN THE UNITED STATES.** T. A. I. M. E., vol. 19, p. 561.
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- COST OF TAIL-ROPE HAULAGE.** Miner's Pocket Book, Lock, pp. 293, 294. Tables.
- COST OF INSTALLATION, MAINTENANCE AND OPERATION OF TAIL-ROPE SYSTEM OF HAULAGE.** E. & M. J., vol. 74, p. 679.
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COST OF DIFFERENT KINDS OF ROPE PER TON HOISTED. T. I. M. & M., vol. 11, p. 172. 1 page.

COST OF LANG LAY ROPES. T. I. M. E., vol. 30, p. 568. Table.

RELATIVE ECONOMY (COST) OF ALOE AND WIRE ROPES FOR MINES. E. & M. J., vol. 18, p. 100. $\frac{1}{2}$ column.

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Cost of Hydraulic Mining

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- LABOR COST IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 299. 1 column.
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- SCHEDULE OF PRICES OF LABOR PER SHIFT, THE RAND MINES. T. A. I. M. E., vol. 39, p. 429. Table.
- COST OF LABOR, TIMBER AND HAULAGE AT THE TURKEY HEAVEN GOLD DISTRICT, ALABAMA. E. & M. J., vol. 55, p. 486.
- LABOR COSTS IN THE ALABAMA AND GEORGIA GOLDFIELDS. T. A. I. M. E., vol. 26, p. 472. Table.
- LABOR COST IN TUNNELING IN THE ALABAMA GOLDFIELDS. E. & M. J., vol. 55, p. 486.
- LABOR COST AT BRILLIANT COAL MINES, ALABAMA (1906). T. A. I. M. E., vol. 37, p. 490. 1 page.
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70 COST OF MINING, MILLING, METALLURGY, ETC.

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72 COST OF MINING, MILLING, METALLURGY, ETC.

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COST OF LEAD SMELTING IN THE UNITED STATES. E. & M. J., vol. 74, p. 208. 1 column.

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COST OF ROASTING ARGENTIFEROUS ZINCBLLENDE AND GALENA. E. & M. J., vol. 47, p. 191. Table.

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COST OF ROASTING ORE. T. A. I. M. E., vol. 10, p. 34.

COST OF ROASTING PER TON WITH THE BROWN ROASTER. E. & M. J., vol. 62, p. 9.

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74 COST OF MINING, MILLING, METALLURGY, ETC.

COST OF ROASTING ORE IN COLORADO. E. & M. J., vol. 78, p. 669. Table.

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Cost of Mine Examination

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COST OF CRIB CONSTRUCTION: Brief Method for Preparing Estimates. By G. A. M. Liljencrantz. J. W. Soc. E., vol. 4, p. 361. 10 pages.

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COST OF CONSTRUCTION MADE OF HOLLOW CONCRETE BLOCKS. E. & M. J., vol. 80, p. 50.

COST OF CONCRETE IN BUILDING CONSTRUCTION. E. & M. J., vol. 76, p. 623.

COST OF CONSTRUCTING A LARGE SHOP BUILDING WITH REINFORCED CONCRETE WALLS AND STEEL ROOF TRUSSES. Eng.-Cont., vol. 27, p. 88. 7 columns. I.

COST OF MILL CONSTRUCTION IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1206. $\frac{1}{2}$ column.

COST OF WOODEN SECTION AND TOOL HOUSES. R. R. Construction, Webb, p. 400. Table.

COST OF ERECTING BUILDINGS PER TON. E. & M. J., vol. 81, pp. 140 and 313. 2 columns.

COST OF BLACKSMITH SHOP AND TOOLS, COMPLETE. M. & M., vol. 25, p. 458. Table.

COST OF MINING PLANT OF 2200 TONS CAPACITY. T. I. M. & M., vol. 7, p. 147. Table.

COST OF CYANIDE PLANT AND ERECTION. T. I. M. & M., vol. 7, p. 148. Table.

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DETAILED COST OF MILL CONSTRUCTION. Ore Dressing, Richards, vol. 2, p. 1125. Table.

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COST OF MILL BUILDINGS. Mill Building Construction, p. 15. Table.

COST OF MILL ERECTION IN WISCONSIN. E. & M. J., vol. 82, p. 152. Table.

COST OF GOLD-MILL CONSTRUCTION. T. A. I. M. E., vol. 10, p. 99.

See also **MILL BUILDING, ETC.**

COST OF CORRUGATED IRON ROOFING. Mill Building Construction, p. 25. Table.

COST OF DIFFERENT KINDS OF ROOF COVERINGS. Mill Building Construction, p. 30.

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COST OF TIPPLE, COMPLETE. M. & M., vol. 25, p. 458. Table.

COST OF TIPPLE AND HEAD FRAME. E. & M. J., vol. 74, p. 407.

COAL TIPPLES: Design and Cost, with Bill of Materials. M. & M., Oct., 1901, p. 139.

APPROXIMATE COST OF HEAD FRAMES AND TIPPLES. E. & M. J., July 14, 1904, p. 64. Table.

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See also **TIPPLES, ETC.**

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COST OF THE PACIFIC COAL COMPANY'S BREAKER AT ALBERTA, CAN-

- ADA. E. & M. J., vol. 83, p. 861. Table.
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76 COST OF MINING, MILLING, METALLURGY, ETC.

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78 COST OF MINING, MILLING, METALLURGY, ETC.

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82 COST OF MINING, MILLING, METALLURGY, ETC.

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- COST OF MINING AND TREATING LEAD ORES IN MEXICO. T. A. I. M. E., vol. 13, p. 366.
- COST OF MINING AND CLEANING THE ORE IN JOPLIN DISTRICT. E. & M. J., vol. 58, p. 392, $\frac{1}{2}$ column; p. 413, $1\frac{1}{2}$ columns; p. 437, 2 columns; and p. 460, $1\frac{1}{2}$ columns.
- COST OF MINING AND MILLING BLUE ROCK PHOSPHATE IN TENNESSEE. E. & M. J., vol. 80, p. 206.
- COST OF MINING AND CONCENTRATING IN THE ZEEHAN AND DUNDAS SILVER FIELD. T. I. M. & M., vol. 4, p. 63.
- See also COST OF MINING, COST OF MILLING, and CONCENTRATION.

Cost of Coal Mining

- AN INVESTIGATION OF THE COST OF MINING COAL. By J. R. Finlay. E. & M. J., vol. 87, p. 948. $10\frac{1}{2}$ columns.

- DETAILED COSTS OF MINING COAL.** Second Geol. Sur. Pa., AC, pp. 359, 360, 362, 363-367.
- THE COST OF MINING COAL.** E. & M. J., vol. 87, p. 1099. 6½ columns.
- ECONOMY IN THE PRODUCTION OF COAL.** Am. Jour. Min., vol. 2, p. 44. ½ column.
- COST IN NARROW AND GOB ENTRY METHODS OF WORKING.** M. & M., vol. 19, p. 59. Table.
- SOME ITEMS OF COST OF COAL MINING.** E. & M. J., vol. 25, p. 252. ½ column.
- COMPARATIVE COST OF LONGWALL AND PILLAR AND STALL METHODS.** Coll. Engr., vol. 9, p. 122. Tables.
- COST OF WORKING BY ROOM AND PILLAR SYSTEM WITHOUT GOBBING-UP.** T. A. I. M. E., vol. 2, p. 110.
- COST OF COAL MINING.** E. & M. J., vol. 54, p. 241. ½ column.
- EXPENSE OF KEEPING A LARGE COLLIERY IN WORKING ORDER.** E. & M. J., vol. 73, p. 753.
- PRICE AND PRODUCTION OF COAL.** E. & M. J., vol. 74, p. 672. 1½ columns.
- COMPARATIVE COSTS OF THE PILLAR-AND-CHAMBER, PILLAR-AND-CHAMBER RETREATING, AND PANEL SYSTEM RETREATING.** M. & M., vol. 27, p. 534. Tables.
- COMPARATIVE COST OF WORKING AN 18-IN. COAL-SEAM: When Bottom-Cutting Is Used as Gobbing; and Bottom Cutting Is Used as Brick Material.** T. I. M. E., vol. 15, p. 61. Table.
- COST OF GETTING COAL.** E. & M. J., vol. 87, p. 1044. 1 column.
- COST OF USE OF HYDRAULIC MINING CARTRIDGES.** T. I. M. E., vol. 15, p. 272. Table.
- COMPARATIVE COSTS OF HYDRAULIC COAL GETTERS AND EXPLOSIVES.** M. & M., vol. 27, p. 247. Tables.
- SEE also MECHANICAL MINING APPLIANCES: GETTERS.**
- COST OF COAL GETTING.** E. & M. J., vol. 48, p. 139. Tables.
- COST OF MACHINE MINING OF COAL.** M. & M., vol. 17, p. 315. Table.
- COST OF REPAIRS FOR MACHINE MINING IN VIRGINIA COAL MINES.** E. & M. J., vol. 84, p. 408.
- COST OF INSTALLATION AND MINING COAL BY MACHINES.** By F. W. Parsons. E. & M. J., vol. 82, p. 304. 2 columns.
- COST OF MACHINE-MINING AND PICK-MINING COMPARED.** T. I. M. E., vol. 17, pp. 174, 175, 176.
- COSTS OF MACHINE MINING OF COAL.** E. & M. J., vol. 89, p. 624. 1½ columns.
- COST OF MACHINE MINING OF COAL.** T. I. M. E., vol. 31, pp. 388, 417, 429.
- COST OF MINING COAL BY MACHINES.** Sch. Mines Quart., vol. 9, p. 313. Tables.
- COSTS OF COAL-CUTTING BY MACHINERY.** T. F. I. M. E., vol. 11, pp. 199, 200.
- COST OF CUTTING COAL BY MACHINE vs. HAND.** T. F. I. M. E., vol. 1, p. 126, Table; p. 132, Table; p. 138, Table.
- ELECTRIC MINING MACHINERY: Some Investigations in Regard to Cost of Operation in Various Mines.** By J. N. Bulkley. M. & M., vol. 18, p. 170. 8 columns.
- COST OF ELECTRIC vs. COMPRESSED AIR WORK IN COAL-CUTTING.** T. F. I. M. E., vol. 11, pp. 499 and 500. Tables.
- COST OF OPERATING ELECTRIC COAL MINING MACHINES.** P. E. Soc. W. Pa., vol. 13, p. 165. Table.
- COST OF ELECTRIC COAL-CUTTING AT THE GLENCELELLAND COLLIERY.** T. F. I. M. E., vol. 9, p. 136. Table.
- See also ELECTRIC COAL MINING MACHINES.**
- COST OF MINING COAL, RED BANK REGION, PENNSYLVANIA.** E. & M. J., vol. 18, p. 51. 1 column.

84 COST OF MINING, MILLING, METALLURGY, ETC.

- COST OF MINING COAL IN THE PENNSYLVANIA COAL MINES.** Rept. Insp. Mines, Pa., 1879, pp. 321 and 323. Tables.
- COST OF MINING AT DANVILLE, PENNSYLVANIA.** T. A. I. M. E., vol. 20, p. 384.
- COST OF MINING IN SOME PENNSYLVANIA ANTHRACITE COLLIERIES.** E. & M. J., vol. 45, p. 193. 1½ columns.
- ESTIMATED COST OF ANTHRACITE MINING BY WITHDRAWING.** E. & M. J., vol. 48, p. 380. Table.
- COST OF ANTHRACITE COAL MINING PER CAR, OR WHAT THE MINER GETS.** E. & M. J., vol. 73, pp. 754 and 887.
- COST OF ANTHRACITE MINER'S OUTFIT.** The Anthracite Coal Industry, Roberts, p. 112. Table.
- INCIDENTAL WORKING EXPENSES OF ANTHRACITE MINER.** The Anthracite Coal Industry, Roberts, p. 113. Table.
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- THE COST OF COAL AND IRON IN ALABAMA.** E. & M. J., vol. 57, p. 74. 1½ columns.
- COST OF MINING COAL IN THE CROW'S NEST PASS, CANADA, FOR WIDE AND NARROW WORK, ALSO COST OF HOISTING AND SCREENING.** E. & M. J., vol. 73, p. 758. ½ column.
- COST OF COAL-MINING IN CHILE, SOUTH AMERICA.** T. I. M. E., vol. 15, p. 242. Table.
- COST OF MINING IN THE KAIPING COAL MINES, CHINA.** T. I. M. & M., vol. 10, p. 425.
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86 COST OF MINING, MILLING, METALLURGY, ETC.

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- COST OF MINING AT THE HOMESTAKE MINE.** T. A. I. M. E., vol. 17, p. 577. Table.
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- THE COST OF MINING AT BROKEN HILL, AUSTRALIA.** Miner's Pocket Book, Lock, p. 260. Table.
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- WORKING COSTS IN THE DEEP LEADS OF VICTORIA.** T. I. M. & M., vol. 17, p. 254. 10 pages. Tables.
- CONDITIONS AFFECTING COST OF WORKING THE DEEP LEADS OF VICTORIA.** T. I. M. & M., vol. 17, p. 224. 3 pages.
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- COST OF OPERATIONS: Gold Mining in Brazil.** T. F. I. M. E., vol. 4, p. 232. Table.

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- COST OF CENTRE STAR MINING OPERATIONS. Min. & Sci. Press, vol. 82, p. 49. Table.
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- COSTS OF GLORY-HOLE MINING AT THE DE LAMAR MINES, NEVADA. E. & M. J., vol. 87, p. 453. Tables.
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- COST OF MINING PENNSYLVANIA ZINC ORES. E. & M. J., vol. 24, p. 3. Table.
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88 COST OF MINING, MILLING, METALLURGY, ETC.

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90 COST OF MINING, MILLING, METALLURGY, ETC.

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92 COST OF MINING, MILLING, METALLURGY, ETC.

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Cost of Operating Elevators and Conveyors

FIRST COST OF CONVEYORS AND COST OF MAINTENANCE OF SAME. The Mechanical Handling of Material, p. 92. Table.

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Cost of Power

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- SAVING IN COST BY INTRODUCING CENTRAL COMPRESSED AIR PLANT.** M. & M., vol. 25, p. 161. $\frac{1}{2}$ column.
- COST OF COMPRESSING AIR, PORTLAND MINE.** T. A. I. M. E., Feb., 1906, p. 1305. Table.
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- COST OF ELECTRICITY VS. COMPRESSED AIR.** E. & M. J., vol. 75, p. 669. Table.
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- COST OF CONSTRUCTION OF A COMPRESSED AIR POWER STATION.** P. E. Soc. W. Pa., vol. 13, p. 188. Table.
- COST OF OPERATING A COMPRESSED AIR MOTOR, AS COMPARED WITH MULE HAULAGE.** M. & M., Sept. 1903, p. 77.
- COST OF POWER FOR OPERATING VARIOUS FORMS OF AIR COMPRESSORS.** M. & M., vol. 27, p. 102. Table.
- COST OF VARIOUS FORMS OF AIR COMPRESSORS.** M. & M., vol. 27, p. 102. Table.
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- COST OF MANUFACTURE OF ILLINOIS GAS.** E. & M. J., vol. 76, p. 507.
- COST OF GASOLINE PUMP FOR IRRIGATION OR MINE USE.** E. & M. J., vol. 80, p. 296.
- COST OF AN OIL-ENGINE FOR UNDERGROUND USE.** T. I. M. E., vol. 18, p. 399.
- COST OF PRIESTMAN'S OIL ENGINE PER HOUR.** T. F. I. M. E., vol. 3, p. 262. Table.
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Cost of Producing Various Materials

PERCENTAGE SUBDIVISION OF COST OF PRODUCING MINERAL: Cost per Ton; Mining Plant, etc.; Labor, Supplies, etc.; Timber, Maintaining Workings etc.; Milling, etc.; and Management, etc. T. A. I. M. E., California Mines and Minerals, p. 64.

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COST OF PRODUCTION AND PROFITS PER TON COAL, BELGIUM. E. & M. J., vol. 74, p. 706.

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COST OF PRODUCING COPPER PER TON. E. & M. J., vol. 30, p. 108. Table.

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100 COST OF MINING, MILLING, METALLURGY, ETC.

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Cost of Sampling

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102 COST OF MINING, MILLING, METALLURGY, ETC.

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Cost of Support

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106 COST OF MINING, MILLING, METALLURGY, ETC.

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Cost of Surveying

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Cost of Trammig

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ESTIMATING COST OF TRAMWAYS. Aerial or Wire-Rope Tramways, pp. 108, 113, 148, 167, and 196. Tables.

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COST OF OPERATING HALLIDIE WIRE-ROPE TRAMWAYS. Aerial or Wire-Rope Tramways, pp. 99, 100, 108, 113, 137. Table.

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See also CABLEWAYS, ETC.

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112 COST OF MINING, MILLING, METALLURGY, ETC.

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- COST OF DRIVING TUNNELS IN PENNSYLVANIA COAL MINES.** Rept. Inspr. Mines, Pa., 1878, p. 248. Table.
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- COST OF CONSTRUCTING A LARGE CONCRETE SEWER, ST. LOUIS, MISSOURI.** Eng.-Cont., vol. 27, p. 61. 4 columns. I.
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- COST OF DRIVING ENTRIES AND ROOMS.** E. & M. J., vol. 75, p. 331.
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114 COST OF MINING, MILLING, METALLURGY, ETC.

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- COST OF ROCK WORK IN COAL SEAMS.** E. & M. J., vol. 74, p. 407. Table.
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- COST OF RUNNING A DRIFT IN SUMATRA.** P. C. M. & M. Soc. S. A., vol. 10, p. 317. Table.
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- See also MISCELLANEOUS PRODUCTION.
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- MINES OF ZOMELAHUACAN, VERACRUZ, MEXICO.** By M. Fishback. E. & M. J., vol. 90, p. 1017. 6½ columns. I.
- CONDITIONS AT THE PALMILLA MINE, PARRAL, MEXICO.** By F. W. Smith. E. & M. J., vol. 90, p. 259. 11½ columns. I.
- HINDS CONSOLIDATED MINES, MEXICO.** By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 598. 3 columns. I.
- CALABACILLAS GOLD MINE, MEXICO.** By C. W. Geddes. Min. & Sci. Press, vol. 98, p. 689. 2½ columns. I.
- THE GRANADENA MINES, MEXICO.** By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- JALISCO AND COHINA, MEXICO.** By W. A. Scott. Min. & Sci. Press, vol. 98, p. 254. 3 columns. I.
- THE MINES OF NORTHWESTERN ALTAR, SONORA, MEXICO.** By G. W. Maynard. E. & M. J., vol. 86, p. 71. 5½ columns. I.
- THE ALTAR GOLD PLACER FIELDS OF SONORA, MEXICO.** E. & M. J., vol. 90, p. 651. 6½ columns. I.
- DRY PLACERS IN NORTHERN SONORA, MEXICO.** By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 360. 2½ columns. I.

- MINING CEMENT GRAVEL AT ALTAR, MEXICO.** By A. Coll. *M. & M.*, vol. 31, p. 229. 4 columns. I.
- THE GRAPHITE MINES OF SANTA MARIA, MEXICO.** By J. C. Mills. *M. & M.*, vol. 29, p. 98. 2½ columns. I.
- IRON RESOURCES OF THE REPUBLIC OF MEXICO.** By E. Ordonez. *E. & M. J.*, vol. 90, p. 665. 6½ columns.
- EXPLORATION OF CERTAIN IRON-ORE AND COAL DEPOSITS IN THE STATE OF OAXACA, MEXICO.** By J. L. W. Birkinbine. *T. A. I. M. E.*, vol. 41, p. 166. 23 pages. I.
- THE CABRILLAS LEAD MINES OF COAHUILA, MEXICO.** By S. J. Lewis. *E. & M. J.*, vol. 89, p. 1071. 8 columns. I.
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- ORES AND MINES OF SANTA EULALIA, MEXICO.** By C. T. Rice. *E. & M. J.*, vol. 85, p. 1283. 9 columns. I.
- THE ORE DEPOSITS OF SANTA EULALIA, MEXICO.** By C. T. Rice. *E. & M. J.*, vol. 85, p. 1229. 10 columns. I.
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- THE OIL FIELDS OF MEXICO.** By H. S. Denny. *Min. Mag.*, London, vol. 3, p. 36. 8 columns. Map.
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- DULCES NOMBRES QUICKSILVER DEPOSITS, MEXICO.** By P. A. Babb. *E. & M. J.*, vol. 88, p. 684. 7½ columns. I.
- THE SALINE DEPOSITS OF CARMEN ISLANDS.** By E. H. Cook. *E. & M. J.*, vol. 85, p. 545. 3½ columns. I.
- THE SILVER MINES OF MEXICO.** By A. F. J. Bordeaux. *T. A. I. M. E.*, vol. 39, p. 357. 11½ pages.
- THE MINERAL RESOURCES OF SONORA.** By F. J. H. Merrill. *Min. & Sci. Press*, vol. 96, p. 33. 14 columns. I. Map.
- SAN JAVIER, AN OLD SILVER DISTRICT OF SONORA.** By C. N. Nelson. *E. & M. J.*, vol. 90, p. 660. 4 columns. Map.
- LAS CHISPAS MINES, SONORA, MEXICO.** By B. E. Russell. *E. & M. J.*, vol. 86, p. 1006. 6 columns. I.
- EL TIGRE MINE, MONTEZUMA DISTRICT, SONORA, MEXICO.** By R. L. Herrick. *M. & M.*, vol. 29, p. 483. 10 columns. I.
- ORES OF THE EL TIGRE MINE, SONORA, MEXICO.** *M. & M.*, vol. 29, p. 486. ½ column.
- THE PROMONTORIO SILVER-MINE, DURANGO, MEXICO.** By F. C. Lincoln. *T. A. I. M. E.*, vol. 38, p. 734. 16 pages. I.
- REMINISCENCES OF MINING IN DURANGO.** By W. D. Beverly. *E. & M. J.*, vol. 88, p. 635. 14 columns. I.
- A TRIP THROUGH NORTHERN DURANGO.** By C. N. Nelson. *E. & M. J.*, vol. 87, p. 697. 4½ columns. I.

- OLD MINING CAMP OF PAZOS, GUANAJUATO, MEXICO.** By H. A. McGraw. E. & M. J., vol. 89, p. 961. 6½ columns. I.
- LORETO MINE AND THE PINGUICO DISTRICT, GUANAJUATO, MEXICO.** By C. W. Botsford. E. & M. J., vol. 88, p. 650. 2½ columns. I.
- THE ZACATECAS DISTRICT AND ITS RELATION TO GUANAJUATO AND OTHER CAMPS.** By C. W. Botsford. E. & M. J., vol. 87, p. 1227. 4 columns. I.
- NOTES ON GUANAJUATO.** By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 83. 2½ columns. I.
- OPERATIONS OF GUANAJUATO DEVELOPMENT COMPANY.** E. & M. J., vol. 88, p. 651. 10 columns. I.
- THE WORKING MINES OF GUANAJUATO.** By C. T. Rice. E. & M. J., vol. 86, p. 806. 8 columns. I.
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- THE GUANAJUATO MINING DISTRICT, MEXICO.** E. & M. J., vol. 90, p. 1310. 6 columns. I.
- GUANAJUATO, THE GREAT SILVER CAMP OF MEXICO.** By C. T. Rice. E. & M. J., vol. 86, p. 669. 9½ columns. I.
- MINES OF AJUCHITLAN, QUERÉTARO, MEXICO.** By S. J. Lewis. Min. & Sci. Press, vol. 100, p. 211. 8½ columns. I.
- THE MINES OF EL DOCTOR, MEXICO.** By T. D. Murphy. Min. & Sci. Press, vol. 95, p. 241. 8½ columns. I.
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- ORE OF THE SANTA BARBARA DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 208. 2 columns.
- LOS LAMENTOS MINE, CHIHUAHUA.** E. & M. J., vol. 87, p. 489. 1 column.
- RECENT MINING DEVELOPMENTS IN CHIHUAHUA.** By A. P. Rogers. E. & M. J., vol. 88, p. 681. 6½ columns. I.
- STORIES OF THE BATOPILAS MINES, CHIHUAHUA, MEXICO.** By M. R. Lamb. E. & M. J., vol. 85, p. 689. 4½ columns. I.
- SANTA BARBARA MINE, CHIHUAHUA, MEXICO.** M. & M., vol. 29, p. 369. 3 columns. I.
- NATIVE SILVER IN SOUTHWESTERN CHIHUAHUA, MEXICO.** By W. M. Brodie. E. & M. J., vol. 89, p. 664. 5½ columns. I.
- TRAVELING IN WESTERN CHIHUAHUA, MEXICO.** By F. H. Morley. E. & M. J., vol. 87, p. 706. 8½ columns.
- MINING IN NORTHERN SINALOA, MEXICO.** By E. A. H. Tays. Min. & Sci. Press, vol. 99, p. 120. 3½ columns. Map.
- THE ANTIGUA OF REAL DE SIVIRIJOA, SINALOA.** By E. A. H. Tays. E. & M. J., vol. 90, p. 1155. 5½ columns. I.
- THE SILVER-MINES OF MEXICO: Discussion of Paper of A. F. J. Bordeaux,** vol. 39, p. 357.
T. A. I. M. E., vol. 40, p. 848. 5 pages.
- THE ZACUALPAN DISTRICT, MEXICO,** By J. M. Platt. E. & M. J., vol. 88, p. 670. 4 columns. I.
- THE SILVER MINE OF "JESUS MARIA," IN NEW LEON, MEXICO.** Min. Mag., vol. 1, p. 34. 14 pages; p. 570. 11½ pages.
- MINES OF PENOLES COMPANY, MAPIMI, MEXICO.** By C. T. Rice. E. & M. J., vol. 86, p. 309. 13½ columns. I.
- PACHUCA AND REAL DEL MONTE SILVER DISTRICT, MEXICO.** By C. T. Rice. E. & M. J., vol. 86, p. 519. 17 columns. I.
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- CEMENT MATERIALS IN REPUBLICAN VALLEY, NEBRASKA.** By N. H. Darton. U. S. G. S., Bull. 430, p. 381. 8 pages. I. 1909.

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- CENTRAL NEVADA.** By A. H. Elftman. Min. & Sci. Press, vol. 96, p. 398. 2 columns. Map.
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- AN OCCURRENCE OF ASPHALITE IN NORTHEASTERN NEVADA.** By R. Anderson. U. S. G. S., Bull. 380, p. 283. 2½ pages. 1908.
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- THE YERINGTON DISTRICT, NEVADA.** By C. S. Durand. M. & M., vol. 31, p. 24. 2½ columns. I.

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- THE MINES AND MILLS OF TONOPAH, NEVADA.** By G. E. Wolcott. E. & M. J., vol. 87, p. 594. 7 columns. I.
- THE GOLDFIELD TYPE OF ORE OCCURRENCE.** By R. T. Hill. E. & M. J., vol. 86, p. 1096. 11½ columns. I.
- GOLDFIELD, NEVADA.** By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 559, 6½ columns, I.; p. 664, 5 columns; p. 738, 6½ columns, I.; p. 774, 6½ columns, I.; p. 840, 8 columns, I.; vol. 97, p. 20, 4½ columns, I.; p. 50, 7½ columns. I.
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- RAWHIDE, NEVADA.** By A. Del Mar. E. & M. J., vol. 85, p. 853. 6 columns. I.
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- ORE FORMATION IN THE WONDER DISTRICT, NEVADA.** By E. A. Ritter. E. & M. J., vol. 87, p. 290. 7 columns. I.
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- THE SEVEN TROUGHS MINING DISTRICT.** By W. M. Hauck. E. & M. J., vol. 85, p. 644. 4 columns. I.
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Theory of Pumping

See first volume of Index.

Pump Tests, Efficiency, etc.

See first volume of Index.

Pumps for Mine Use

REVIEW OF PAST AND PRESENT STEAM PUMPING AT MINES. By J. Tipping. T. Au. I. M. E., vol. 2, p. 31. 19½ pages.

METHODS OF PUMPING DEEP GROUND WATERS. By C. B. Burdick. J. W. Soc. E., vol. 12, p. 719. 37 pages. I.

THE PUMPING PROBLEMS AT THE TOMBSTONE MINE. By W. F. Staunton. E. & M. J., vol. 89, p. 174. 3½ columns.

PUMPING AT BISBEE, ARIZONA. By C. C. Austin. M. & M., vol. 31, p. 132. 4 columns. I.

PUMP STATION AT LEONARD MINE, BUTTE. E. & M. J., vol. 90, p. 400. 2½ columns. I.

THE OLD DOMINION PUMPING SYSTEM. By R. L. Herrick. M. & M., vol. 31, p. 324. 6 columns. I.

DEEP PUMPING ON THE COMSTOCK. M. & M., vol. 30, p. 761. 5½ columns. I.

PUMPING PLANT AT THE WARD SHAFT, VIRGINIA CITY, NEVADA. E. & M. J., vol. 89, p. 575. 1½ columns. I.

PUMPING PLANT AT THE TOMBSTONE CONSOLIDATED. By E. W. Walker. E. & M. J., vol. 88, p. 160. 5½ columns. I.

AN URGENT PUMPING PROBLEM AND HOW IT WAS SOLVED. By J. A. Seager. E. & M. J., vol. 88, p. 509. 2½ columns. I.

THE EMERSON STEAM PUMP. E. & M. J., vol. 85, p. 555. 1½ columns. I.

LOWERING A LARGE PUMP INTO A MINE. By G. J. Young. E. & M. J., vol. 87, p. 806. 2½ columns. I.

THE SINKING PUMP AND ITS TROUBLES. By M. T. Hoster. E. & M. J., vol. 89, p. 601. 2½ columns. I.

See also SHAFT SINKING.

See also COST OF PUMPING AND BAILING.

Water Rings for Mine Shafts

WATER RINGS IN THE FILBERT SHAFT, PENNSYLVANIA. M. & M., vol. 30, p. 560. ½ column. I.

WATER-RINGS FOR CIRCULAR SHAFTS. T. I. M. E., vol. 38, p. 25. ½ page.

Rotary Pumps

CENTRIFUGAL PUMPS. By W. R. Wiley. J. W. Soc. E., vol. 15, p. 228. 36 pages. I.

KINEMATICS OF ONE FORM OF ROTARY PUMP OR BLOWER. By S. W. Balch. Sch. Mines Quart., vol. 30, p. 21. 6 pages. I.

THE DESIGN OF CENTRIFUGAL PUMPS. By J. A. Seager. E. & M. J., vol. 90, p. 1216. 6 columns. I.

CENTRIFUGAL PUMP EFFICIENCY. By V. V. Messer. Min. & Sci. Press, vol. 98, p. 696. 4½ columns. I.

EFFICIENCY OF CENTRIFUGAL PUMPS. By F. W. Kerns. Min. & Sci. Press, vol. 100, p. 862. 2½ columns.

MOTOR DRIVEN CENTRIFUGAL PUMP FOR MINE USE. By C. Robinson. E. & M. J., vol. 87, p. 404. 3½ columns. D.

MINE PUMPING WITH DIRECT CONNECTED ELECTRICALLY DRIVEN TURBINE PUMPS. By P. H. Moore. J. M. Soc. N. S., vol. 12, p. 1. 8½ pages.

See also ELECTRICITY IN THE MINE.

THE LEA-DEGEN TURBINE PUMP. E. & M. J., vol. 86, p. 1005. 2 columns. I.

INSTALLATION AND USE OF TURBINE PUMPS. By M. S. Hachita. Coal Mining Supplement, E. & M. J., vol. 88, p. 22. 8½ columns. I.

MINE DRAINAGE

Cornish Pumps

CORNISH PUMPS. Min. & Sci. Press, vol. 97, p. 46, 4½ columns, I.; p. 83, 3 columns; p. 179, 4 columns. D.

CORNISH PUMPS AND PUMPING ENGINES. By H. F. Collins. Min. & Sci. Press, vol. 98, p. 289, 3½ columns; p. 317, 4½ columns. D.

COMPOUND CORNISH PUMPING ENGINES. By W. P. Gauvain. Min. & Sci. Press, vol. 99, p. 62. 5½ columns. Diagrams.

See also COST OF PUMPING AND BAILING.

Hand Pumps and Water Portage

See first volume of Index.

Hydraulic Pumps

THE KOERTING WATER-JET EDUCTOR. E. & M. J., vol. 85, p. 1251. ½ column. I.

INJECTOR OF HYDRAULIC SYSTEM USED IN THE C. AND C. SHAFT, COMSTOCK LODGE. M. & M., vol. 29, p. 154. I.

See also HYDRAULIC MINING.

Siphons in Mines

THE SIPHON IN MINING. By J. T. Beard. M. & M., vol. 31, p. 427. 4½ columns. I.

PUMPING AND SIPHONING HOT WATER. By J. T. Beard. M. & M., vol. 31, p. 663. 3 columns. I.

Compressed Air Pumping

THE AIR-LIFT PUMP. J. W. Soc. E., vol. 12, p. 751. 2 pages. I.

AIR-LIFT PUMP EMPLOYED IN UNWATERING MINE AFTER MINE FIRE. E. & M. J., vol. 85, p. 640. 4 columns. I.

DIRECT AIR-PRESSURE PUMPING. Min. & Sci. Press, vol. 96, p. 819. 2½ columns. I.

AIR LIFT PUMPING. By E. A. Rix. Min. & Sci. Press, vol. 101, p. 505. 4 columns. Tables.

EFFICIENCY OF THE SOLUTION PUMP. By E. & M. J., vol. 88, p. 2 umns. I.

NOTES ON THE POHLE AIR RAISING BY BALING W. S. Anderson. E. & M. J., vol. 88, p. 256. 2½ columns.

RAISING LIQUIDS BY COMPRESSED AIR AND E. & M. J., vol. 87, p. 646. ½ column. I.

THE ECONOMIC USE OF COMPRESSED AIR IN THE ELEVATION OF TAILINGS. By J. W. Archibald. T. Au. I. M. E., vol. 8, pt. 1, p. 103. 4½ pages.

UNWATERING SHAFT BY COMPRESSED AIR. By L. Boudoire. E. & M. J., vol. 90, p. 848. 1½ columns. I.

See also SHAFT SINKING.

ELECTRIC REHEATER FOR AIR-DRIVEN PUMPS. E. & M. J., vol. 89, p. 1216. 1 column. I.

See also COMPRESSED AIR IN MINING.

Vacuum Pumps

THE VACUUM-PUMP IN THE CYANIDING OF SAND. By W. A. Caldecott. Min. & Sci. Press, vol. 98, p. 316. 1½ columns.

THE USE OF THE VACUUM PUMP IN THE CYANIDING OF SAND. P. C. M. & M. Soc. S. A., vol. 9, p. 240. 2 columns.

Sinking Pumps

See first volume of Index.

Electrically Driven Pumps

ELECTRICALLY DRIVEN MINE PUMPS. By S. F. Walker. E. & M. J., vol. 87, p. 422. 4 columns.

ELECTRICAL MINE-PUMPS IN EUROPE. By A. S. Atkinson. Min. & Sci. Press, vol. 99, p. 334. 4 columns.

EXPERIMENTS WITH TWO ELECTRICALLY-DRIVEN PUMPS. By T. L. Galloway. T. I. M. E., vol. 36, p. 82. 11 pages.

See also ELECTRICITY IN MINING.

See also ELECTRIC HOISTING.

See also COST OF PUMPING AND BAILING.

WATER AT COLLIERY SHAFT.
A. G. Brackett. M. & M., vol. 21, p. 631. 3 columns. I.

WATER TANK AND COUNTERWEIGHT USED AT THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 391. $\frac{1}{2}$ column. I.

HOISTING MINE WATER. E. & M. J., vol. 87, p. 1281. $3\frac{1}{2}$ columns.

See also HOISTING IN MINING.

See also COST OF PUMPING AND BAILING.

Unwatering Shafts

UNWATERING THE MEXIAMORA MINE AT GUANAJUATO. By F. H. Clark. E. & M. J., vol. 89, p. 271. $4\frac{1}{2}$ columns. I.

UNWATERING FLOODED MINES. By D. Lamont. E. & M. J., vol. 90, p. 639. 3 columns.

RECLAIMING FLOODED DRIFT MINES IN ALASKA. By W. H. Lanagan. Min. & Sci. Press, vol. 100, p. 892. $6\frac{1}{2}$ columns. I.

Drainage Tunnels

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CUSTOM TUNNELS FOR DRAINAGE AND TRANSPORTATION OF ORE. E. & M. J., vol. 85, p. 852. $2\frac{1}{2}$ columns.

THE ROOSEVELT DEEP DRAINAGE TUNNEL, COLORADO. By R. M. Bagg. E. & M. J., vol. 88, p. 1061. 5 columns. I.

THE LOS ANGELES AQUEDUCT TUNNEL WORK. Min. & Sci. Press, vol. 100, p. 681. $3\frac{3}{4}$ columns. I.

See also TUNNELING.

See also EXAMPLE OF TUNNELS.

Pipes and Pipe Fitting

CAPACITY OF PIPES. P. C. M. & M. Soc. S. A., vol. 9, p. 320. $\frac{1}{2}$ column.

TESTS OF CAST IRON REINFORCED CONCRETE CULVERT PIPE. By A. N. Talbot. J. W. Soc. E., vol. 13, p. 376. 58 pages. I.

FORGED-STEEL BOLTED PIPE CONNECTION. E. & M. J., vol. 85, p. 1195. $\frac{1}{2}$ column. I.

CONCRETE PIPE CULVERTS. By O. P. Chamberlain. J. W. Soc. E., vol. 12, p. 81. 19 pages. I.

See also USE OF CONCRETE IN MINES.

WOOD PIPES. M. & M., vol. 29, p. 322. 1 column.

ZOLLNERS' PATENT WATER PIPE. By F. D. Power. T. Au. I. M. E., vol. 5, p. 131. 7 pages. Table.

CONSTRUCTION OF UNDERGROUND PIPELINES. T. I. M. & M., vol. 17, p. 450, 1 page, I.; p. 457, 1 page, I.

TABLE OF GRADES FOR LAUNDERS AND PIPES IN REDUCTION PLANTS. By C. O. Schmitt. P. C. M. & M. Soc. S. A., vol. 9, p. 242. 1 column. Table.

See also LAUNDERS AND DISTRIBUTORS.

A CALIFORNIA PIPE LINE. E. & M. J., vol. 86, p. 707. 1 column.

See COST OF PIPES AND PIPE LAYING.

Ditches and Channels

DITCHES: Method of Calculating Sections and Construction for Mining Work. By D. Waterman. Min. & Sci. Press, vol. 98, p. 352. 8 columns. I. Diagrams.

See also COST OF FLUME CONSTRUCTION.

Valves, Valve-Gear, Sumps, etc.

See first volume of Index.

DRILLING AND BORING

General

- THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. E. & M. J., vol. 90, p. 12. 2 columns.
- HISTORY OF THE ROCK DRILL. By W. L. Saunders. Min. & Sci. Press, vol. 100, p. 735. 2 columns.
- THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. M. & M., vol. 31, p. 18. 1½ columns.
- HISTORY OF THE WATER LEYNER DRILL. By C. A. Hirschberg. M. & M., vol. 31, p. 148. 2 columns.
- EVOLUTION OF WELL-DRILLING MACHINERY. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 676. 3½ columns.
- See also HISTORY OF MINING.
- CONTRACT FOR DRILLING. Min. & Sci. Press, vol. 99, p. 615. ½ column.

Hand Drills

- THE HAND DRILL IN PROSPECTING PLACER DEPOSITS. By J. P. Hutchins. E. & M. J., vol. 86, p. 1141. 13½ columns. I.
- HAND BORING BY THE VICTORIAN MINES DEPARTMENT. T. Au. I. M. E., vol. 7, p. 49. 7 pages. I.
- WEAR OF STEEL IN HAND DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 153. ½ column.
- NOTES ON HAMMER DRILL WORK AT THE GRANITE MINES, BRITISH COLUMBIA. By H. B. Williams. T. I. M. & M., vol. 19, p. 463. 5½ pages. I.
- HAND DRILLING IN ALLUVIUM. By E. K. Hall. Min. & Sci. Press, vol. 101, p. 118. 2 columns.
- HAND CHURN DRILLING. By O. H. Packer. Min. & Sci. Press, vol. 99, p. 296. 1½ columns.
- See also COST OF DRILLING AND BORING.

Machine or Power Drills

- NOTES ON THE CONSTRUCTION AND PRACTICAL OPERATION OF ROCK DRILLING MACHINES. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 6, p. 38, 20½ columns, I.; p. 118, 24½ columns, I.; p. 162, 11 columns; p. 193, 3 columns; p. 217, 11½ columns.
- NOTES ON SMALL STOPE DRILLS. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 8, p. 109. 23 columns, I.; p. 151, 2½ columns; p. 189, 1 column; p. 210, 20 columns; p. 270, 15 columns.
- AIR-DRILLS AND THEIR EFFICIENCY. By S. K. Patterson. Min. & Sci. Press, vol. 97, p. 467. 2½ columns.
- EFFECT OF HIGH AND LOW AIR PRESSURE IN OPERATING DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 216. 1 column.
- THE SCIENCE OF ECONOMICALLY MINING HARD GROUND WITH PRECUSSIVE ROCK DRILLS AND COMPRESSED AIR. By W. A. T. Davies. T. Au. I. M. E., vol. 11, p. 151. 13 pages. I.
- ROCK DRILLS AND AIR ECONOMY. E. & M. J., vol. 87, p. 895. 3 columns. I.
- MODERN ROCK DRILLING. M. & M., vol. 30, p. 385. 5 columns. I.
- DRILLING MACHINES. Min. & Sci. Press, vol. 20, p. 56. ½ column.
- MACHINE VS. HAND DRILLING IN SINKING ON THE RAND. By E. M. Weston. E. & M. J., vol. 85, p. 439. 10½ columns. I.
- MACHINE WORK VS. HAND DRILLING, SOUTH AFRICA. T. Au. I. M. E., vol. 5, p. 33. Tables.
- THE GORDON DRILL. E. & M. J., vol. 87, p. 468. ½ column. I.
- THE WALSKI HYDRAULIC ROCK DRILL. By F. A. Talbot. E. & M. J., vol. 89, p. 1278. 5 columns. I.

THE SCOTT GASOLINE ROCK DRILL. E. & M. J., vol. 86, p. 1008. $\frac{1}{2}$ column. I.

THE STEPHENS CLIMAX IMPERIAL HAMMER DRILL. By E. M. Weston. E. & M. J., vol. 87, p. 657. $3\frac{1}{2}$ columns. I.

MINE DRILLING IN THE HOG MOUNTAIN MINES, ALABAMA. T. A. I. M. E., vol. 39, p. 581. $\frac{1}{2}$ page.

MACHINE DRILLS FOR STOPING. By E. M. Weston. E. & M. J., vol. 85, p. 1002. $12\frac{1}{2}$ columns, I.; p. 1045, $8\frac{1}{2}$ columns, I.

DRIFTING WITH A STOPING DRILL. By H. E. Moon. M. & M., vol. 31, p. 697. $\frac{1}{2}$ column. I.

COMPARATIVE VALUE OF DRILLS IN STOPING. E. & M. J., vol. 87, p. 895. 1 column. I.

LARGE DRILLS IN STOPING. E. & M. J., vol. 89, p. 19. 1 column.

DRILLS FOR STOPING. By A. Del Mar. Min. & Sci. Press, vol. 96, p. 169. 2 columns.

METHOD OF DRILLING AND ORDER OF BLASTING THE ROOSEVELT TUNNEL, COLORADO. E. & M. J., vol. 88, p. 1062. D.

FAILURE OF STOPE DRILLS ON THE RAND. E. & M. J., vol. 85, p. 110. $1\frac{1}{2}$ columns.

DUST COLLECTOR FOR ROCK DRILLS. E. & M. J., vol. 85, p. 957. $\frac{1}{2}$ column.

See also **HEALTH OF MINERS, and COST OF DRILLING AND BORING.**

Air-Hammer Drills

REQUISITES FOR AIR-HAMMER DRILL BITS. By G. E. Walcott. Min. & Sci. Press, vol. 101, p. 674. $1\frac{1}{2}$ columns. I.

THE MERITS AND DEMERITS OF AIR-HAMMER DRILLS. By G. E. Walcott. E. & M. J., vol. 85, p. 351. $8\frac{1}{2}$ columns. I.

THE DEVELOPMENT OF THE HAMMER DRILL. P. C. M. & M. Soc. S. A., vol. 8, p. 63. $2\frac{1}{2}$ columns.

DEVELOPMENT OF THE AIR-HAMMER ROCK DRILL. By C. T. Rice. E. & M. J., vol. 85, p. 1035. 4 columns. I.

HAMMER TYPE OF DRILLS VS. RECIPROCATING PISTONS. P. C. M. & M. Soc. S. A., vol. 8, p. 213. 1 column. See also **COST OF DRILLING AND BORING.**

Electric Drills

COMPARATIVE MERITS OF AIR AND ELECTRIC DRILLS. P. C. M. & M. Soc. S. A., vol. 7, p. 59. 1 column.

A NOVEL ROCK DRILL: Electrically Driven. By A. Gradenwitz. E. & M. J., vol. 87, p. 1181. 2 columns. I.

THE MOTOR ELECTRIC DRILLS FOR MINING SERVICE. T. A. I. M. E., vol. 5, p. 24. 8 pages. I.

THE ELECTRIC-AIR DRILL. By W. L. Saunders. T. A. I. M. E., vol. 38, p. 472. 10 pages. I.

See also **COST OF DRILLING AND BORING.**

Forming and Tempering Drills

DRILL STEEL. P. C. M. & M. Soc. S. A., vol. 8, p. 262. 2 columns. I.

CRUCIFORM STEEL FOR MACHINE-DRILLS. By E. P. Kennedy. Min. & Sci. Press, vol. 97, p. 391. $1\frac{1}{2}$ columns.

STOPING-DRILL STEELS. M. & M., vol. 31, p. 717. 2 columns. I.

DRILL STEEL BITS AND DRILL STEEL. T. A. I. M. E., vol. 11, p. 156. 1 page.

ROCK DRILL BITS. By T. H. Proske. Min. & Sci. Press, vol. 100, p. 347. $5\frac{1}{2}$ columns. I.

SELECTION AND USE OF BITS FOR POWER DRILLS. By M. De Cennes. E. & M. J., vol. 87, p. 1183. $4\frac{1}{2}$ columns. I.

FORMS OF DRILL BITS. P. C. M. & M. Soc. S. A., vol. 8, p. 263, I.; p. 275. Note.

DESIGN OF BITS FOR POWER DRILLS.

By E. K. Judd. E. & M. J., vol. 88, p. 1220. 3½ columns. I.

THE DRESSING OF DRILL BITS. T.

Au. I. M. E., vol. 11, p. 157. 1 page.

DUNSTON'S DRILL SHARPENER. E. &

M. J., vol. 85, p. 1048. 2 columns. I.

SHARPENING DRILLS UNDERGROUND.

E. & M. J., vol. 87, p. 767. 1½ columns.

CALUMET AND HECLA DRILL-SHARPENING DEVICE. By C. L. C. Fichtel.

E. & M. J., vol. 87, p. 1073. 7 columns. I.

Use of Bore Holes

AN ARRANGEMENT FOR HOLING INTO OLD WORKINGS. E. & M. J., vol. 88, p. 213. 2 columns.

See also DRAINAGE IN GENERAL.

Prospect Drilling

PROSPECT DRILLING IN THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol. 89, p. 872. 3 columns. I.

PROSPECT DRILLING AT RAY, NEVADA. M. & M., vol. 29, p. 545. 1 column.

DRILLING WITH AN AUGER BIT. E. & M. J., vol. 86, p. 1143. 1 column.

DRILL USED IN PROSPECTING FOR COAL. M. & M., vol. 30, p. 454. ¼ column. I.

PROSPECT DRILLING IN THE JOPLIN DISTRICT. By O. Ruhl. M. & M., vol. 29, p. 6. 3½ columns. I.

PROSPECTING WITH THE DIAMOND DRILL. By B. Hunt. Min. & Sci. Press, vol. 96, p. 257. 2½ columns.

See also DIAMOND AND ROTARY DRILLS, and CHURN DRILLS AND DRILLING.

THE DRILL AS A MEANS OF TESTING FOR GRAVEL. Min. & Sci. Press, vol. 98, p. 721. 7 columns. I.

See also VALUE OF MINES, ETC.

OIL-WELL DRILLING IN CALIFORNIA. By W. R. Jewell. Min. & Sci. Press, vol. 101, p. 775. 3½ columns.

BRINGING IN A GUSHER. E. & M. J., vol. 90, p. 807. 1½ columns. I.

PROSPECT DRILLING FOR OIL IN MEXICO. Min. Mag., London, vol. 3, p. 283. 6 columns. I.

DRILLING FOR OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 613. 8½ columns. I.

PROSPECTING FOR COAL: Boring. Min. Mag., vol. 7, p. 258, 7½ pages; p. 463, 7½ pages.

See also PETROLEUM, ETC.

SEARCHING FOR COAL: Prospect Drilling. Min. Mag., vol. 8, p. 322. 11 pages; vol. 7, p. 463. 7½ pages.

UNDERGROUND BORING TO PROVE A LOWER COAL SEAM. E. & M. J., vol. 86, p. 581. ¼ column.

See also PROSPECTING, ETC.

DRILLING FOR PLACER EXAMINATION. M. & M., vol. 29, p. 540. 5 columns.

See also AURIFEROUS GRAVELS.

TESTING DREDGEABLE GRAVELS. By W. H. Radford. Min. & Sci. Press, vol. 98, p. 721. 7 columns. I.

DRILLING IN ALLUVIAL GROUND IN ALASKA. By T. A. Rickard. Min. & Sci. Press, vol. 99, p. 558. 3½ columns. I.

See also VALUE OF MINES.

WELL DRILLING MACHINES FOR COPPER PROSPECTING. By W. G. Weber. Min. & Sci. Press, vol. 101, p. 14. 4½ columns.

See also COST OF DRILLING AND BORING.

Drill Records and Reports

DIAMOND DRILL RECORDS AT MOUNT MORGAN. E. & M. J., vol. 89, p. 712. ¼ column.

NEED OF COMPLETE RECORD OF PROSPECT DRILL HOLES. By H. C. George. E. & M. J., vol. 89, p. 528. 1½ columns.

A REMARKABLE DRILL CORE. M. & M., vol. 30, p. 727. 3 columns. I.

A CORE-DRILL HOLE OF UNUSUAL SIZE. E. & M. J., vol. 88, p. 1237. 1 column.

- DRILL CORE PROBLEMS.** By A. C. Lane. M. & M., vol. 30, p. 670. 2½ columns. I.
- A DIAMOND DRILL CORE SECTION OF THE MESABI ROCKS.** By N. H. Winchell. T. L. S. M. I., vol. 14, p. 156, 22 pages; vol. 15, p. 100, 42 pages, I.
- RECORD OF BOREHOLE No. 1 OF THE STANDARD COAL AND RAILWAY COMPANY, LIMITED, ABOUT ONE MILE NORTH OF HALFWAY RIVER LAKE, CUMBERLAND COUNTY, NOVA SCOTIA.** By R. H. Brown. J. M. Soc. N. S., vol. 10, p. 162. 6 pages.
- SAMPLING SLUDGE OF CHURN DRILLS.** E. & M. J., vol. 90, p. 851. 1 column.
- INACCURACIES OF CHURN DRILL SAMPLING.** By H. A. Field. E. & M. J., vol. 89, p. 953. 1 column.
- See also **METHODS OF SAMPLING, ETC.**
- DIAMOND DRILL REPORTS.** E. & M. J., vol. 90, p. 1147. ½ column. D.
- See also **DIAMOND AND ROTARY DRILLS** and **CHURN DRILLS AND DRILLING.**
- Churn Drills and Drilling**
- COMPLETE CHURN DRILL EQUIPMENT FOR PROSPECTING.** E. & M. J., vol. 90, p. 998. ½ column. Table.
- DRILLING WITH BAMBOO RODS.** By W. A. Moller. T. I. M. E., vol. 36, p. 437. 6 pages. I.
- STEAM CHURN DRILL IN HOT AND COLD CLIMATES.** By J. P. Hutchins. E. & M. J., vol. 86, p. 218. 9 columns. I.
- ELECTRICALLY-DRIVEN WELL-DRILLER.** By J. V. Downie. Min. & Sci. Press, vol. 99, p. 269. 2½ columns. I.
- NEW DEVELOPMENTS IN WELL BORING AND IRRIGATION IN EASTERN SOUTH DAKOTA.** By N. H. Darton. U. S. G. S., 18th Ann. Rept., pt. 4, pp. 561-616, 1896-97. I.
- BORING: Prospect Work by Churn Drill.** Min. Mag., vol. 10, p. 451. 4½ pages.
- CHURN DRILLING AT ELY, NEVADA.** M. & M., vol. 29, p. 81. ½ column.
- CHURN DRILLING IN ELY DISTRICT.** By J. L. Dobbins. M. & M., vol. 29, p. 526. 4 columns. I.
- DETAILS OF CHURN DRILL OPERATIONS AT SILVERBELL, ARIZONA.** By M. B. Gentry. E. & M. J., vol. 90, p. 850. 4½ columns. I.
- PROSPECTING WITH CHURN DRILLS AT MIAMI, ARIZONA.** By H. A. Field. E. & M. J., vol. 90, p. 804. 5 columns. D.
- See also **PROSPECT DRILLING.**
- CHURN DRILLING IN THE JOPLIN DISTRICT.** E. & M. J., vol. 89, p. 1150. 3 columns. I.
- UNDERGROUND PROSPECT DRILLING IN THE JOPLIN DISTRICT: Churn Drilling.** By F. W. Sansom. E. & M. J., vol. 90, p. 157. ½ column.
- SUCCESSFUL PROSPECTING WITH CHURN DRILL UNDER UNFAVORABLE CONDITIONS.** E. & M. J., vol. 87, p. 420. 3 columns.
- CHURN DRILL PROSPECTING IN THE JOPLIN DISTRICT.** By J. F. Haley. E. & M. J., vol. 89, p. 1150. 3 columns. I.
- THE CHURN-DRILL AS A MEANS FOR PROSPECTING.** By E. E. Carter. Min. & Sci. Press, vol. 96, p. 572. 1½ columns.
- CHURN DRILLING FOR BLASTING.** E. & M. J., vol. 88, p. 178. ½ column.
- THE STEEL OIL DERRICK.** By R. B. Woodworth. P. E. Soc. W. Pa., vol. 25, p. 245. 67½ pages. I.
- STEEL DERRICKS AND DRILLING MACHINES.** Min. & Sci. Press, vol. 101, p. 259. 2 columns. I.
- DEVELOPMENT AND DESIGN OF THE STEEL OIL DERRICK.** By R. B. Woodworth. E. & M. J., vol. 88, p. 304. 16½ columns. I.
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THE DIAMOND DRILL IN THE ANTHRACITE FIELDS. By F. Lynde. E. & M. J., vol. 88, p. 258. 9 columns. I.

PROSPECTING WITH DIAMOND DRILLS IN MEXICAN MINES. E. & M. J., vol. 86, p. 313. $1\frac{1}{2}$ columns.

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DEEP DIAMOND-BORING AT BALFOUR MAINS, FIFESHIRE, GREAT BRITAIN. By J. G. Thompson. T. I. M. E., vol. 36, p. 574. 6 pages. I.

CALYX BORING BY THE VICTORIAN MINES DEPARTMENT. By S. Hunter. T. Au. I. M. E., vol. 7, p. 46. 3 pages. I.

DIAMOND DRILL, CALYX AND HAND BORING BY THE VICTORIAN MINES DEPARTMENT. By S. Hunter. T. Au. I. M. E., vol. 7, p. 23. 40 pages. I.

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USE OF THE TERRY CORE DRILL IN MINE OPERATIONS. E. & M. J., vol. 89, p. 1156. 6 columns. I.

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See also **COST OF DRILLING AND BORING.**

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THE WORLD'S DEEPEST BORE-HOLE. P. C. M. & M. Soc. S. A., vol. 7, p. 307. Note.

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188 INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

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Surveying Bore Holes

DEFLECTION OF BOREHOLES IN DIAMOND DRILLING. P. C. M. & M. Soc. S. A., vol. 7, p. 380. ¼ column.

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SURVEYING DIAMOND DRILL HOLES. Sch. Mines Quart., vol. 30, p. 305. 3 pages. I.

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See also DIAMOND AND ROTARY DRILLS.

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CAPILLARY ATTRACTION IN DIAMOND DRILL TEST TUBES. By J. E. Jopling. E. & M. J., vol. 89, p. 423. 3 columns. I.

CAPILLARY ATTRACTION IN DIAMOND DRILL TEST TUBES. By J. E. Jopling. T. L. S. M. I., vol. 14, p. 131. 10 pages. I.

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Reamers for Boring Apparatus

See first volume of Index.

THE INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

Economic and Industrial Features of Mining

ECONOMY IN MINING OPERATIONS. By T. E. Lambert. Min. & Sci. Press, vol. 95, p. 341. 6 columns. I.

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INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION 189

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E., vol. 39, p. 211. 12½ pages.

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See also OCCURRENCES OF IRON ORES.

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See also CHEMISTRY: Methods and Practice.

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PROFIT PER ACRE. E. & M. J., vol. 89, p. 13. 2 columns.

See also VALUE OF MINES.

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Mining Statistics

See first volume of Index

The Development and Production of Precious Metal Mining

THE HISTORY OF GOLD AND SILVER. By J. W. Malcolmson. Min. & Sci. Press, vol. 95, p. 784. 5½ columns.

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190 INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

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INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION 191

CONSERVATION AS IT AFFECTS COAL LANDS. By E. W. Parker. *Min. & Sci. Press*, vol. 101, p. 469. 3½ columns.

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See also **CONCRETE AND USE OF CONCRETE IN MINES.**

See also **DREDGING FOR GOLD AND OTHER MATERIALS, and WASTE IN MINING.**

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192 INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

See also METALLURGY OF COPPER.

See also COST OF PRODUCING VARIOUS MATERIALS.

The Iron Trade

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See also OCCURRENCE OF IRON ORES.

See also METALLURGY OF IRON AND STEEL.

See also IRON BLAST FURNACES, ETC., also COST OF PRODUCING VARIOUS MATERIALS.

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ALABAMA OPERATORS DISCUSS COAL PROBLEMS. E. & M. J., vol. 90, p. 326. 11½ columns.

FACTS CONCERNING PRESENT FUEL SITUATION. By F. W. Parsons. E. & M. J., vol. 90, p. 773. 6 columns. I.

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MINING COAL. By L. C. Moore. P. E. Soc. W. Pa., vol. 23, p. 241. 18 pages.

THE ANTHRACITE TRUST DECISION. E. & M. J., vol. 90, p. 1199. 2½ columns.

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See also OCCURRENCE OF COAL, and COST OF PRODUCING VARIOUS MATERIALS.

INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION 193

Miscellaneous Production

MINERAL AND METAL PRODUCTION IN 1907. E. & M. J., vol. 85, p. 1. 3 columns.

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See also ARIZONA.

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See also AFRICA.

REVIEW OF PROGRESS IN THE MINERAL PRODUCTION OF BRITISH COLUMBIA. By E. Jacobs. J. C. M. I., vol. 10, p. 183. 5 pages.

See also BRITISH COLUMBIA.

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MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1909. J. C. M. I., vol. 13, p. 56. 3 pages.

MINERAL PRODUCTION OF CALIFORNIA IN 1907. E. & M. J., vol. 86, p. 731. 3 columns.

See also CALIFORNIA.

MINERAL PRODUCTION OF CANADA. E. & M. J., vol. 85, p. 598. 9 columns.

MINERAL PRODUCTION OF CANADA IN 1909. By J. McLeish. E. & M. J., vol. 89, p. 607. 8½ columns.

See also CANADA.

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See also CHILE.

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See also IDAHO.

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See also MARYLAND.

EARLY PRODUCTION OF THE JOPLIN LEAD AND ZINC DISTRICT. E. & M. J., vol. 85, p. 561. ½ column.

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JOPLIN ZINC AND LEAD PRODUCTION FOR 1910. By L. L. Wittich. M. & M., vol. 31, p. 435. 1 column. Table.

See also MISSOURI.

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Self-Dumping Cages

See first volume of Index.

Skip Dumps

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ARRANGEMENT OF SELF-DUMPING UNDERGROUND SKIP. E. & M. J., vol. 89, p. 553. 1 column. I.

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- EDUCATION AMONG MINERS.** Min. Mag., vol. 10, p. 54, 1½ pages; p. 191, 3½ pages; p. 273, 4½ pages.

Correspondence and Trade Schools

- SECONDARY MINING EDUCATION.** By H. H. Stoek. M. & M., vol. 29, p. 203. 7 columns.
- SECONDARY MINING EDUCATION.** M. & M., vol. 29, p. 316, 2 columns; p. 478, 2½ columns.
- SECONDARY MINING EDUCATION.** By H. H. Stoek. J. C. M. I., vol. 11, p. 504. 20 pages.
- THE SUPPORT OF SECONDARY TECHNICAL SCHOOLS BY THE STATE.** By F. E. Turneure. P. Soc. P. E. E., vol. 13, p. 184. 21 pages.
- THE NEW OPPORTUNITY FOR THE SECONDARY SCHOOL.** By C. M. Woodward. P. Soc. P. E. E., vol. 11, p. 25. 8½ pages.

REPORT OF COMMITTEE ON INDUSTRIAL EDUCATION. By A. L. Williston. P. Soc. P. E. E., vol. 16, p. 363. 43 pages.

REPORT OF THE COMMITTEE ON INDUSTRIAL EDUCATION. P. Soc. P. E. E., vol. 15, p. 416. 28 pages.

EDUCATION FOR INDUSTRIAL WORKERS. By A. D. Dean. P. Soc. P. E. E., vol. 15, p. 494. 16 pages.

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EDUCATION OF MECHANICS. By H. M. Lane. P. Soc. P. E. E., vol. 13, p. 177. 7 pages.

EDUCATION FOR FACTORY MANAGEMENT. By H. Diemer. P. Soc. P. E. E., vol. 11, p. 151. 20 pages.

THE ORGANIZATION OF TRADE AND ELEMENTARY TECHNICAL SCHOOLS. By A. L. Williston. P. Soc. P. E. E., vol. 11, p. 46. 12 pages.

THE SPECIAL APPRENTICESHIP COURSE. By C. E. Downton. P. Soc. P. E. E., vol. 15, p. 459. 6 pages.

Theory and Practice

PRACTICE AND SCIENCE. P. C. M. & M. Soc. S. A., vol. 9, p. 370. 2 columns.

APPLICATION OF DESCRIPTIVE GEOMETRY TO MINING PROBLEMS. By J. W. Roe. T. A. I. M. E., vol. 41, p. 512. 21 pages. I.

A BRIEF METHOD FOR CALCULATING INTEREST. By J. J. Smith. E. & M. J., vol. 90, p. 812. 2½ columns.

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THE DEFLECTION POLYGON OF A FRAMED STRUCTURE AS A FUNICULAR POLYGON. By M. S. Falk. Sch. Mines Quart., vol. 30, p. 27. 5½ pages. D.

USEFUL FORMULAS. By F. Close. E. & M. J., vol. 87, p. 1241. 2½ columns.

Societies, Periodicals and Expositions

SOME NOTES ON THE HISTORY AND RECENT DEVELOPMENT OF THE CANADIAN MINING INSTITUTE. By H. Mortimer-Lamb. J. C. M. I., vol. 13, p. 588. 8 pages.

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MINING ENGINEERS AND MINING INSTITUTES. By J. D. Kendall. J. C. M. I., vol. 13, p. 596. 3½ pages.

THE ENGINEER AND THE ENGINEERING SOCIETY. By G. E. Flanagan. P. E. Soc. W. Pa., vol. 25, p. 152. 10 pages.

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ALASKA-YUKON-PACIFIC EXPOSITION. By R. L. Herrick. M. & M., vol. 30, p. 99. 12 columns. I.

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THE PART OF SIGMA XI IN SCIENTIFIC EDUCATION. By H. B. Ward. P. Soc. P. E. E., vol. 15, p. 285. 10 pages.

TECHNICAL WRITING. By H. H. Stoek. M. & M., vol. 29, p. 84, 5 columns; p. 134, 5 columns, I.

MINING LITERATURE. By A. Greenwell. J. C. M. I., vol. 13, p. 579. 9½ pages.

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Experimentation and Research

See first volume of Index.

Summer School Work

SUMMER SCHOOLS FOR PROSPECTORS. *J. C. M. I.*, vol. 11, p. 504. 5 pages.

SUMMER SCHOOLS FOR PROSPECTORS. *M. & M.*, vol. 29, p. 205. $1\frac{1}{2}$ columns.

THE SUMMER SCHOOL PROBLEM, PARTICULARLY FOR SURVEYING AND GEOLOGY. By C. Derleth. *P. Soc. P. E. E.*, vol. 17, p. 216. 22 pages.

THE CORNELL SUMMER SCHOOL OF SURVEYING. By C. L. Crandall. *P. Soc. P. E. E.*, vol. 13, p. 71. 16 pages. I.

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Definitions and Terms

DEFINITION OF ASSAYS. *E. & M. J.*, vol. 85, p. 327. $\frac{1}{2}$ column.

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See also **METHODS OF ASSAYING.**

DEFINITION OF "MARGIN." *E. & M. J.*, vol. 85, p. 970. $\frac{1}{2}$ column.

See also **MINE INVESTMENTS.**

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Drawing, Blue-Printing, Etc.

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Weights and Measures

ABSOLUTE AND GRAVITATIONAL SYSTEMS OF UNITS. By E. R. Maurer. *P. Soc. P. E. E.*, vol. 12, p. 209. 12 pages.

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THE CARAT WEIGHT. By E. J. Valentine. *M. & M.*, vol. 29, p. 34. $3\frac{1}{2}$ columns.

INTERNATIONAL ATOMIC WEIGHTS. *P. C. M. & M. Soc. S. A.*, vol. 5, p. 215. 1 column.

SUGGESTIONS FOR A NEW ATOMIC THEORY. By J. Moir. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 334. 16 $\frac{1}{2}$ columns. I.

SUGGESTIONS FOR A NEW ATOMIC THEORY. By J. Moir. P. C. M. & M. Soc. S. A., vol. 10, p. 96. 6 columns.

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See also **CHEMISTRY.**

THE ASSAY WEIGHT AND ITS RELATION TO THE BALANCE OF PRECISION. By A. Whitby. P. C. M. & M. Soc. S. A., vol. 5, p. 40, 11 columns; p. 82, ½ column; p. 101, 7½ columns; p. 127, ½ column; p. 150, 1 column.

See also **METHODS OF ASSAYING.**

METHOD OF SPECIFIC GRAVITY DETERMINATION. By A. C. Dart. Min. & Sci. Press, vol. 100, p. 529. 1 column.

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See also **PROPERTIES OF VARIOUS METALS.**

Symbols

See first volume of Index.

Models of Mines and Machinery

MODEL OF RICHARDSON MINE, UPPER SEAL HARBOUR, NOVA SCOTIA. J. M. Soc. N. S., vol. 13, facing p. 26. I.

MINE MODELS AND PLANS. By N. Dudley. T. Au. I. M. E., vol. 1, p. 99. 4½ pages.

GLASS MINE-MODELS. By E. D. North. T. A. I. M. E., vol. 40, p. 755, 7 pages, I.; Discussion, p. 913, 3 pages.

MODEL OF THE NORTH STAR MINE, GRASS VALLEY, CALIFORNIA: Model for Inclined Veins. E. & M. J., vol. 90, p. 1243. 1½ columns. I.

UNITED VERDE MINE MODEL. By C. V. Hopkins. M. & M., vol. 30, p. 501. 3½ columns. I.

CRUST MAPS AND MODELS. By T. S. Harrison and H. C. Zulch. M. & M. vol. 29, p. 49. 10 columns. I.

HEAD-FRAME MODELS MADE OF PAPER M. & M., vol. 30, p. 401. 3 columns. I.

See also **MINE MAPS.**

Engineering Laboratories, Government Mint, Etc.

THE EXPERIMENT STATION AT LIEVIN, FRANCE. By T. Callot. E. & M. J., vol. 88, p. 1. 12½ columns. I.

LABORATORIES FOR TESTING STRUCTURAL MATERIALS, UNITED STATES GEOLOGICAL SURVEY, ST. LOUIS, MISSOURI: Mortars, Cements and Concretes. P. Soc. P. E. E., vol. 13, p. 314. 7 pages.

THE LABORATORY: Its Economic Value. By A. M. Johnston. P. C. M. & M. Soc. S. A., vol. 8, p. 101, 14½ columns, I.; p. 147, 5 columns; p. 210, 1 column; p. 240, 6 columns; p. 297, 3½ columns.

THE ENGINEERING EXPERIMENT STATION AT IOWA STATE COLLEGE. By G. W. Bissell. P. Soc. P. E. E., vol. 15, p. 549. 9 pages.

A LABORATORY COURSE IN TESTING MATERIALS OF CONSTRUCTION. By W. K. Hatt. P. Soc. P. E. E., vol. 13, p. 252. 27 pages.

LABORATORY EQUIPMENT AT THE WASHOE REDUCTION WORKS. M. & M., vol. 30, p. 522. 1 column.

- THE ENGINEERING EXPERIMENT STATION OF THE UNIVERSITY OF ILLINOIS.** By L. P. Buckenridge. P. Soc. P. E. E., vol. 15, p. 558. 16 pages.
- CEMENT LABORATORY PRACTICE.** By I. O. Baker. P. Soc. P. E. E., vol. 16, p. 216. 22 pages. I.
- ELECTRICAL LABORATORY EQUIPMENT AND EFFICIENCY.** By S. S. Edmands. P. Soc. P. E. E., vol. 16, p. 202. 13 pages. I.
- THE WORK IN THE MECHANICAL AND ELECTRICAL LABORATORIES OF SIBLEY COLLEGE.** By R. C. Carpenter. P. Soc. P. E. E., vol. 14, p. 234. 5 pages.
- THE EQUIPMENT OF AN ELECTRICAL ENGINEERING LABORATORY.** By W. M. Riggs. P. Soc. P. E. E., vol. 11, p. 179. 14 pages.
- THE ORGANIZATION AND CONDUCT OF AN ELECTRICAL ENGINEERING LABORATORY.** By J. W. Shuster. P. Soc. P. E. E., vol. 15, p. 148. 7 pages.
- THE BUILDING AND EQUIPMENT OF THE ROCKEFELLER PHYSICAL LABORATORY OF THE CASE SCHOOL OF APPLIED SCIENCE.** By D. C. Miller. P. Soc. P. E. E., vol. 15, p. 180. 7 pages. I.
- DETERMINATION OF THE VELOCITY OF GAS WITH THE PITOT TUBE.** By O. E. Jager and G. C. Westley. E. & M. J., vol. 88, p. 468. 4½ columns. I.
- THE LIQUEFACTION OF GASES.** P. C. M. & M. Soc. S. A., vol. 5, p. 182. 5½ columns.
- THE PROPERTIES OF MATTER: Solid State.** P. C. M. & M. Soc. S. A., vol. 9, p. 449. 2 columns.
- General Requirements of Engineering Education**
- THE PROGRESS AND INFLUENCE OF TECHNICAL EDUCATION.** By V. C. Alderson. P. Soc. P. E. E., vol. 13, p. 127. 19 pages.
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- REPORT OF COMMITTEE ON REQUIREMENTS FOR GRADUATION:** With Particular Reference to Engineering Schools. P. Soc. P. E. E., vol. 12, p. 99, 32 pages; p. 205, 27 pages.
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- THE RELATION OF TECHNICAL EDUCATION TO INDUSTRIAL PROGRESS.** By F. H. Sexton. J. M. Soc. N. S., vol. 11, p. 1. 25 pages.
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- THE ENGINEERING COLLEGE AND THE ELECTRIC MANUFACTURING COMPANY.** By C. F. Scott. P. Soc. P. E. E., vol. 15, p. 465. 29 pages.
- THE ENGINEERING EXPERIMENT STATION AND ITS RELATION TO ILLINOIS INDUSTRIES.** By L. P. Breckenridge. J. W. Soc. E., vol. 14, p. 487. 46 pages. I.
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- EMPLOYERS' REQUIREMENTS OF TECHNICAL GRADUATES.** By H. Diemer. P. Soc. P. E. E., vol. 17, p. 172. 7 pages.
- WHY MANUFACTURERS DISLIKE COLLEGE STUDENTS.** By F. W. Taylor. P. Soc. P. E. E., vol. 17, p. 79. 26 pages.

EXPLOSIVES FOR MINING PURPOSES**Development of Explosives**

TWENTY YEARS PROGRESS IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 9, p. 247. 1 column.

RESEARCHES IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 7, p. 389. 1½ columns.

Explosive Regulations for Cities, Mines, Etc.

RULES IN UTAH REGARDING POWDER IN MINES. M. & M., vol. 30, p. 324. ½ column.

POWDER RULES IN A NOVA SCOTIA COAL MINE. E. & M. J., vol. 86, p. 625. 2 columns.

THE NEW OHIO LAW ON EXPLOSIVES. E. & M. J., vol. 86, p. 823. 1½ columns.

COAL-MINE LEGISLATION IN KANSAS. E. & M. J., vol. 87, p. 648. 1 column.

Kinds of Explosives

STANDARDIZATION OF EXPLOSIVES. By C. E. Munroe. Min. & Sci. Press, vol. 100, p. 326. 1½ columns.

THE DIFFERENCE BETWEEN PERMISSIBLE EXPLOSIVES AND BLACK POWDERS. E. & M. J., vol. 89, p. 1333. ½ column.

See also **SAFETY EXPLOSIVES.**

CHARACTERISTICS OF EXPLOSIVES. T. Au. I. M. E., vol. 9, p. 38. 4 pages.

HIGH EXPLOSIVES AND SAFETY-FUSE. By E. Taylor. Min. & Sci. Press, vol. 98, p. 726. 2½ columns.

See also **PRIMERS, FUSES, ETC.**

EXPLOSIVES FOR TUNNEL DRIVING. M. & M., vol. 31, p. 159. 2½ columns. I.

EXPLOSIVES FOR TUNNEL DRIVING. Min. & Sci. Press, vol. 101, p. 211. 1 column.

NITRO-STARCH DYNAMITE, ITS MANUFACTURE AND PRACTICAL USE IN

MINING AND QUARRYING. By A. M. Vici. J. C. M. I., vol. 13, p. 470. 7 pages.

DYNAMITE: Its Nature and Value. Min. & Sci. Press, vol. 96, p. 676. 2 columns.

A NEW EXPLOSIVE: Dualine. Min. & Sci. Press, vol. 20, p. 49. 1½ columns.

COLOR WRAPPERS FOR EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 9, p. 240, 1½ columns; p. 291, ½ column.

Manufacture of Explosives

DYNAMITE: Its Manufacture and Uses. Min. & Sci. Press, vol. 22, p. 355. 1½ columns.

See First Volume of INDEX.

Explosive Properties of Various Materials

HEAT OF COMBUSTION OF EXPLOSIVES. M. & M., vol. 31, p. 429. ½ column.

HEAT OF COMBUSTION AND EXPLOSIVE TEMPERATURE OF EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 10, p. 321. 1 column.

RAPIDITY OF THE DETONATION OF EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 8, p. 162. ½ column.

EXPLOSIVE COMBUSTION. P. C. M. & M. Soc. S. A., vol. 8, p. 390. 1 column.

Safety Explosives

SAFETY BLASTING EXPLOSIVES. By A. M. Comey. M. & M., vol. 29, p. 145. 8 columns. I.

PERMISSIBLE EXPLOSIVES. Min. & Sci. Press, vol. 98, p. 801. 2½ columns.

LIST OF PERMISSIBLE EXPLOSIVES. E. & M. J., vol. 87, p. 1190. 2 columns.

PERMISSIBLE EXPLOSIVES, TESTED PRIOR TO MAY 15, 1909. M. & M., vol. 29, p. 574. 2½ columns.

DU PONT PERMISSIBLE EXPLOSIVES. By F. H. Gonsolus. M. & M., vol. 29, p. 578. 1½ columns.

PERMISSIBLE EXPLOSIVES AS USED IN COAL MINES. By J. J. Rutledge. E. & M. J., vol. 89, p. 670. 12 columns.

LIST OF PERMISSIBLE EXPLOSIVES, 1909. M. & M., vol. 30, p. 317. 1½ columns.

Primers, Fuses, Etc.

THE PROPER DETONATION OF HIGH EXPLOSIVES. By C. S. Hurter. T. L. S. M. I., vol. 15, p. 142. 36 pages. I.

EFFECT OF COMPRESSION ON BURNING OF FUSE. E. & M. J., vol. 86, p. 823. ½ column.

SAFETY-FUSES IN FRANCE. T. I. M. E., vol. 37, p. 689. 2 pages.

SAFETY-FUSES AND HIGH EXPLOSIVES. Min. & Sci. Press, vol. 98, p. 726. 2½ columns.

TESTING OF SAFETY FUSE BY X-RAYS. P. C. M. & M. Soc. S. A., vol. 9, p. 183. 1 column. I.

See also **TESTING EXPLOSIVES.**

FULMINATING VS. WHITE PHOSPHOROUS FOR IGNITERS. M. & M., vol. 31, p. 76. 1 column.

NEW FUSE FOR INCREASING THE SAFETY OF SHOT-FIRING IN FIERY MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 396. 1½ columns.

NOTES ON SAFETY FUSE: Its Manufacture, Testing and Use. By J. Thomas. P. C. M. & M. Soc. S. A., vol. 5, p. 117, 10 columns, I.; p. 153, 4 columns; p. 176, 5½ columns; p. 227, 4½ columns.

See also **SAFETY EXPLOSIVES.**

ELECTRIC FUSES. E. & M. J., vol. 89, p. 228. 2 columns. I.

FUSES: Electrical and Delayed-Action Fuses. M. & M., vol. 31, p. 222. 4 columns. I.

DELAY-ACTION FUSES. M. & M., vol. 30, p. 500. ½ column.

DETONATORS: Their Construction and Use. M. & M., vol. 30, p. 487. 2 columns. I.

PROPER METHODS OF PLACING FUSE IN CARTRIDGES. M. & M., vol. 31, p. 224. 1 column. I.

See also **METHODS OF FIRING EXPLOSIVES.**

FIRING AMMONIUM NITRATE EXPLOSIVES. M. & M., vol. 31, p. 767. 3 columns.

FUSES FOR SUBMARINE WORK. M. & M., vol. 31, p. 224. 2 columns. I.

See also **KINDS OF EXPLOSIVES.**

Use of Explosives in Mining

A PRIMER ON EXPLOSIVES FOR COAL MINERS. By C. E. Munroe and C. Hall. U. S. G. S., Bull. 423, 61 pages. 1909.

USE OF EXPLOSIVES IN BRITISH COAL MINES. E. & M. J., vol. 90, p. 613. 3½ columns.

KINDS OF EXPLOSIVES USED IN THE ANTHRACITE MINES. M. & M., vol. 29, p. 47. ½ column.

See also **KINDS OF EXPLOSIVES.**

THE USE OF BLACK POWDER IN COAL MINES. E. & M. J., vol. 90, p. 974. 2½ columns.

AMOUNT OF POWDER USED IN THE NOVA SCOTIA COAL MINES. E. & M. J., vol. 86, p. 625. ½ column.

AN IMPROVED METHOD OF BLASTING COAL. E. & M. J., vol. 86, p. 1014. 1 column. I.

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See also **BLASTING IN MINES: Methods and Conditions.**

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See also **COST OF BLASTING.**

See also **COST OF EXPLOSIVES AND BLASTING.**

Quantity of Explosives Used in Mining

See first volume of Index.

Testing Explosives

TESTS OF EXPLOSIVES. M. & M., vol. 29, p. 73. 1½ columns.

TESTS FOR EXPLOSIVES. M. & M., vol. 29, p. 308. 2 columns.

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Handling Explosives

TRANSPORTATION OF EXPLOSIVES. E. & M. J., vol. 88, p. 131. 1 column.

SAFE TRANSPORTATION OF EXPLOSIVES. E. & M. J., vol. 90, p. 1192. 2½ columns.

PRECAUTIONS IN USE OF EXPLOSIVES IN MINES. T. Au. I. M. E., vol. 6, p. 28. 1½ pages.

HANDLING EXPLOSIVES IN MINES OF NEW YORK. E. & M. J., vol. 86, p. 1094. 2 columns.

TO DESTROY EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 9, p. 318. ¼ column.

Storage of Explosives

DYNAMITE STOREHOUSE. E. & M. J., vol. 85, p. 1300. 1 column. I.

UNDERGROUND MAGAZINES. T. Au. I. M. E., vol. 9, p. 56. 1 page.

A MAGAZINE AND THAWING HOUSE FOR DYNAMITE. By G. F. Samuel. M. & M., vol. 29, p. 87. 2 columns. I.

See also **THAWING GIANT POWDER.**

STORAGE OF EXPLOSIVES IN AND ABOUT MINES IN THE BITUMINOUS FIELDS OF PENNSYLVANIA. M. & M., vol. 29, p. 95. ¼ column.

STORAGE OF EXPLOSIVES IN COLORADO. E. & M. J., vol. 86, p. 1088. ¼ column.

STORAGE OF EXPLOSIVES IN MONTANA. E. & M. J., vol. 86, p. 1093. ¼ column.

STORING EXPLOSIVES IN NEW YORK. E. & M. J., vol. 86, p. 1094. ¼ column.

STORAGE OF EXPLOSIVES IN MINES. E. & M. J., vol. 90, p. 602. ¼ column.

FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING 209

THAWING POWDER. By W. P. Rogers. Min. & Sci. Press, vol. 98, p. 248. 1 column. I.

See also **STORAGE OF EXPLOSIVES.**

SAFE AND CONVENIENT THAWER. Min. & Sci. Press, vol. 101, p. 443. 1 column. I.

Thawing Giant Powder

See first volume of Index.

FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

Composition and Characteristics of Coal

VOLATILE MATTER IN COAL. By H. C. Porter and F. K. Ovitz. M. & M., vol. 29, p. 180. 13 columns. I.

THE NATURE OF THE VOLATILE MATTER IN COAL. By H. C. Porter and F. K. Ovitz. E. & M. J., vol. 86, p. 720. 6 columns.

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See also **COAL ANALYSIS.**

See also **COST OF FUEL.**

Decomposition of Coal

THE WEATHERING OF COALS. T. A. I. M. E., vol. 40, p. 57. 4 pages.

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See also **SAMPLING COAL AND ORES.**

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See also **TESTING FUELS AND THEIR VALUE.**

210 FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

Coke: Its Properties and Manufacture

HEATING PROPERTIES OF COKE AND COAL. *Min. Mag.*, vol. 10, p. 113. 11½ pages.

See also COMPOSITION AND CHARACTERISTICS OF COAL.

CHARCOAL AND COKE AS BLAST-FURNACE FUELS. By R. H. Sweetser. *T. A. I. M. E.*, vol. 39, p. 228. 7½ pages. D.

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See also TESTING FUELS AND THEIR VALUE.

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AN ELONGATED COKE OVEN. By W. R. Elliott. *M. & M.*, vol. 29, p. 352. 4½ columns. I.

THE MITCHELL PATENT COKE OVEN. By J. Fulton. *M. & M.*, vol. 30, p. 247. 11 columns. I.

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RETORT COKE OVENS IN MEXICO. By E. B. Wilson. *M. & M.*, vol. 31, p. 257. 8 columns. I.

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KOPPERS BY-PRODUCT COKE OVENS. By W. E. Hartman. *M. & M.*, vol. 31, p. 185. 5 columns. I.

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See also TESTING FUELS AND THEIR VALUE.

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FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING 211

ELECTRICALLY OPERATED COKE SQUEEZING MACHINES. By A. Gradenwitz. E. & M. J., vol. 87, p. 647. 4 columns. I.

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See also GAS FOR POWER.

See also COST OF FUEL.

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212 FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

Gas for Power: Its Generation and Use

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See also **GENERAL APPLICATION OF POWER.**

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See also **TESTING FUELS AND THEIR VALUE.**

See also **COST OF FUEL.**

Fuel Substitutes, Etc.

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FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING 213

BURNING WOOD UNDER BOILERS. By E. G. Tilden. E. & M. J., vol. 87, p. 499. 2 columns. I.

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See also **TESTING FUELS AND THEIR VALUE.**

See also **COST OF FUEL.**

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See also **CONSUMPTION AND WASTE OF COAL.**

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214 FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

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234 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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236 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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246 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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250 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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252 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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See also **MAPS OF COUNTRIES AND DISTRICTS.**

See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.**

See also **THE COAL TRADE.**

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254 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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- THE SOUTH UTAH MINE AND MILL.** By L. Palmer. *M. & M.*, vol. 31, p. 592. 8½ columns. I.
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- CHARACTER OF THE CUBAN COPPER MINES.** *J. C. M. I.*, vol. 13, p. 97. 2½ pages.
- "TWO CUBAN MINES": Copper.** By B. B. Lawrence. *J. C. M. I.*, vol. 13, p. 91. 18 pages. I.
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- DIAMOND MINES AND ALLUVIAL DEPOSITS, SOUTH AFRICA: The Method Employed in Winning Diamonds on the Vaal River Alluvial Fields.** By P. R. Day. *T. Au. I. M. E.*, vol. 6, p. 87. 6 pages. I.
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THE DIAMOND BEARING HIGHLANDS OF BAHIA, BRAZIL. By J. C. Branner. E. & M. J., vol. 87, p. 981, 17½ columns, I.; p. 1029, 12½ columns, I.

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Fuller's Earth Deposits

PROPERTIES AND TESTS OF FULLER'S EARTH. By J. T. Porter. U. S. G. S., Bull. 315, p. 268. 22½ pages. 1906.

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KENTUCKY FLUORSPAR AND ITS VALUE TO THE IRON AND STEEL INDUSTRIES. By F. J. Fohs. T. A. I. M. E., vol. 40, p. 261. 13 pages.

Occurrence of Glass Sands

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The Occurrence of Gold

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262 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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- THE GOLD-FIELDS OF FRENCH GUIANA AND THE NEW METHOD OF DREDGING.** By A. F. J. Bordeaux. T. A. I. M. E., vol. 41, p. 567. 28 pages. I.
- GOLD-BEARING GRAVELS IN FRENCH GUIANA.** T. A. I. M. E., vol. 41, p. 575. 10 pages.
- GOLD MINES OF TIBET.** By A. Del Mar. Min. & Sci. Press, vol. 100, p. 254. 3½ columns.
- GOLD MINING IN COLOMBIA.** By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 217. 12½ columns. I.
- PASTO GOLD DISTRICT, COLOMBIA.** Min. & Sci. Press, vol. 100, p. 583. 2 columns. I.
- QUARTZ MINES IN COLOMBIA, SOUTH AMERICA.** By F. F. Sharpless. Min. & Sci. Press, vol. 97, p. 422. 4½ columns. I.
- GOLD MINING IN COLOMBIA.** By F. L. Garrison. Min. Mag., London, vol. 2, p. 369. 15½ columns. I.
- THE FUTURE GOLD OUTPUT OF COLOMBIA.** By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- ALLUVIAL GOLD DEPOSITS AND MINING IN COLOMBIA.** By P. A. Alig.

266 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- E. & M. J., vol. 90, p. 1098. 4 columns.
- COLOMBIAN GOLD PLACERS. T. A. I. M. E., vol. 39, p. 418. 1 page. Table.
- PRIMARY GOLD IN COLORADO GRANITE. By J. B. Hastings. T. A. I. M. E., vol. 39, p. 97. 6 pages. I.
- LESSONS FROM GILPIN COUNTY PRACTICE. By G. E. Collins. Min. & Sci. Press, vol. 101, p. 366. 11½ columns.
- THE ALICE MINE: Colorado's Largest Ore Body. By R. L. Herrick. M. & M., vol. 29, p. 294. 6 columns. I.
- REPORT ON THE POVERTY GULCH MINE. By C. W. Henderson. M. & M., vol. 31, p. 586, 5½ columns, I.; p. 694, 7 columns, I.
- GOLD ORE NEAR NEWCASTLE, COLORADO. By F. Rickard. Min. & Sci. Press, vol. 99, p. 503. 1 column. I.
- THE SAN JUAN REGION, COLORADO. By T. T. Read. Min. & Sci. Press, vol. 97, p. 632, 8 columns, I.; p. 668, 10 columns, I.
- GOLD DEPOSITS OF SAN JUAN, COLORADO. By W. C. Prosser. M. & M., vol. 31, p. 335. 5 columns. I.
- MINING IN THE SAN JUAN, COLORADO. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 610, 5½ columns, I.; p. 737, 6½ columns, I.; p. 865, 3½ columns, I.
- THE CRESSON MINE, CRIPPLE CREEK, COLORADO. By R. L. Herrick. M. & M., vol. 31, p. 735. 11½ columns. I.
- LA PLATA MOUNTAINS, COLORADO. By R. H. Toll. Min. & Sci. Press, vol. 97, p. 741. 6½ columns. Map.
- TREASURE MOUNTAIN, COLORADO. By C. W. Purington. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.
- LAKE FORK EXTENSION OF THE SILVERTON MINING AREA, COLORADO. By L. W. Woolsey. U. S. G. S. Bull. 315, p. 26. 5 pages. 1906.
- MINING IN GEORGETOWN QUADRANGLE. By S. H. Ball. M. & M., vol. 30, p. 205. 9½ columns. Map.
- HOHNS PEAK, COLORADO. E. & M. J., vol. 86, p. 809. 2½ columns. I.
- GOLD PLACER DEPOSITS NEAR FAY, ROUTT COUNTY, COLORADO. By H. S. Gale. U. S. G. S., Bull. 340, p. 84. 13 pages. I. 1907.
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- DRY PLACERS OF THE BLACK HILLS. Min. & Sci. Press, vol. 101, p. 571. 1½ columns.
- PLACERS OF THE BLACK HILLS, SOUTH DAKOTA. Min. & Sci. Press, vol. 101, p. 573. 2 columns.
- GOLD MINING INDUSTRY IN THE DUTCH EAST INDIES. By E. A. Winton. E. & M. J., vol. 88, p. 513. 4½ columns. Map.
- OCCURRENCE OF AURIFEROUS AND STANIFEROUS TOURMALINE IN SUMATRA. By L. Hundeshagen. E. & M. J., vol. 87, p. 1003. ½ column.
- GOLD MINING IN EGYPT. By C. S. Herzig. Min. & Sci. Press, vol. 95, p. 212. 4½ columns. I.
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- GOLD MINING IN FRANCE. By T. A. Rickard. Min. Mag., London, vol. 1, p. 283. 4 columns. I.
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- THE THREE PRODUCING GOLD MINES OF FRANCE. By E. Walch. E. & M. J., vol. 87, p. 792. 6 columns. I.

- GOLD DEPOSITS OF GEORGIA.** By E. K. Soper. Min. & Sci. Press, vol. 100, p. 923. 3½ columns.
- MOORE'S GOLD MINES, DAHLONEGA, GEORGIA.** Min. Mag., vol. 2, p. 24. 3 pages.
- THE GOLD PLACERS OF LUMPKIN COUNTY, GEORGIA.** Min. Mag., vol. 10, p. 457. 20 pages.
- ATLANTA GOLD DISTRICT, IDAHO.** By R. N. Bell. E. & M. J., vol. 86, p. 176. 4 columns. I.
- BOISE BASIN, IDAHO.** By W. A. Scott. Min. & Sci. Press, vol. 101, p. 76. 6 columns. I.
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- COPPER-GOLD SMELTING AT MAGISTRAL.** By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE ARTEAGA MINING DISTRICT, CHIHUAHUA, MEXICO.** E. & M. J., vol. 89, p. 618. 3 columns. I.
- ARTEAGA DISTRICT, CHIHUAHUA, MEXICO.** By W. B. Winston. Min. & Sci. Press, vol. 98, p. 829. 3½ columns. I.
- THE CALABACILLAS MINE, CHIHUAHUA.** By R. T. Sill. E. & M. J., vol. 90, p. 359. 1½ columns. I.
- MINING OPERATIONS IN THE STATE OF CHIHUAHUA, MEXICO.** By W. H. Seamon. E. & M. J., vol. 90, p. 654. 6½ columns.
- THE ARTEAGA DISTRICT, CHIHUAHUA.** By L. T. Pockman. E. & M. J., vol. 90, p. 656. 3½ columns. I.
- YOQUIVO MINE AND MILL, WESTERN CHIHUAHUA.** By W. H. Seamon. E. & M. J., vol. 90, p. 811. 4 columns. I.
- PACHUCA DISTRICT, MEXICO.** By J. L. Mennell. Min. & Sci. Press, vol. 100, p. 455. 3 columns. I.
- SANTA GERTRUDE'S AND LA BLANCA MINES, PACHUCA, MEXICO.** E. & M. J., vol. 88, p. 670. 1 column. I.
- THE SANTA GERTRUDE'S MINE, PACHUCA, MEXICO.** E. & M. J., vol. 89, p. 214. 9 columns. I.
- SOME FEATURES OF MINING AT PACHUCA, MEXICO.** E. & M. J., vol. 86, p. 1051. 4½ columns.
- SAN RAFAEL Y ANEXAS MINING COMPANY, PACHUCA, MEXICO.** By E. Girault. E. & M. J., vol. 90, p. 643. 9 columns. I.
- LAS PILARES MINE, SONORA, MEXICO.** By E. M. Robb. M. & M., vol. 31, p. 106. 11½ columns. I.
- OCCURRENCE OF GOLD AND SILVER ORES AT THE LAS PILARES MINE.** M. & M., vol. 106. 2½ columns. I.
- MINAS PEDRAZZINI OPERATIONS NEAR ARIZPE, SONORA, MEXICO.** By E. L. Dufoureq. E. & M. J., vol. 90, p. 1105. 5½ columns.
- MINING IN OAXACA, MEXICO.** By E. M. Lawton. Min. & Sci. Press, vol. 99, p. 232. 3½ columns. I.
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- ORE OF THE ESPERANZA MINE, MEXICO.** Min. & Sci. Press, vol. 99, p. 847. 2½ columns.
- MINING IN THE ALAMOS AND ARTEAGA DISTRICTS.** By G. M. Bloomer. E. & M. J., vol. 87, p. 699. 6 columns. I.
- ALAMOS-PROMONITOS DISTRICT, MEXICO.** By T. P. Brinegar. Min. & Sci. Press, vol. 100, p. 553. 3 columns. I.
- MINING AND SMELTING AT ACHOTTA MINE, GUERRERO, MEXICO.** By W. B. Devereux, Jr. E. & M. J., vol. 90, p. 663.

- EL RAYO GOLD MINE, NEAR SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 78. 7 columns. I.
- SAN JOSE DE GRACIA, A GREAT MEXICAN GOLD CAMP. By E. A. H. Tays. E. & M. J., vol. 88, p. 640. 16 columns. I.
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- MINING CEMENT GRAVEL AT ALTAR, MEXICO. By A. Coll. M. & M., vol. 31, p. 229. 4 columns. I.
- RECENT DEVELOPMENTS NEAR HELENA, MONTANA. E. & M. J., vol. 90, p. 354. 1½ columns. Map.
- RADERSBURG DISTRICT, MONTANA. Min. & Sci. Press, vol. 101, p. 170. 3 columns. D.
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- NOTES ON THE MANHATTAN PLACERS, NYE COUNTY, NEVADA.** By C. C. Jones. E. & M. J., vol. 88, p. 101. 8 columns. I.
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- NOTES ON OPERATIONS IN JARBRIDGE CAMP, NEVADA.** By W. W. Fisk. E. & M. J., vol. 90, p. 763. 5½ columns. Map.
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- THE BLACK RANGE MINING DISTRICT, NEW MEXICO.** By M. Fishback. E. & M. J., vol. 89, p. 911. 4 columns. I.
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270 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- REVIVAL OF MINING IN THE MOGOLONS, NEW MEXICO. By E. G. Spillbury. E. & M. J., vol. 88, p. 62. 10½ columns. I.
- THE LORDSBURG MINING DISTRICT, NEW MEXICO. By E. D. Fry. E. & M. J., vol. 90, p. 820. 1 column.
- MINES OF THE LORDSBURG DISTRICT, NEW MEXICO. By J. L. Wells. E. & M. J., vol. 87, p. 890. 2½ columns.
- THE MANZANO GROUP OF THE RIO GRANDE VALLEY, NEW MEXICO. By W. T. Lee and G. H. Girty. U. S. G. S., Bull. 389. 141 pages. I. 1909.
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- PIZ-PIZ DISTRICT, NICARAGUA. By W. A. Connelly. Min. & Sci. Press, vol. 100, p. 350. 4 columns. Map.
- GOLD IN EASTERN NICARAGUA. By C. C. Semple. Min. & Sci. Press, vol. 99, p. 221. 6½ columns. I.
- NOTES ON THE NICARAGUAN GOLDFIELDS. By M. R. Walker. E. & M. J., vol. 88, p. 263. 3½ columns. I.
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- SOME OF THE CAUSES OF THE PRESENT CONDITION OF GOLD MINING IN NOVA SCOTIA. By G. W. Stuart. J. M. Soc. N. S., vol. 12, p. 85. 19½ pages.
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- WICHITA MOUNTAINS, OKLAHOMA. By G. W. Kneisly. Min. & Sci. Press, vol. 97, p. 873. 1 column. Map.
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- THE PHILIPPINE GOLD MINES.** By M. Woolley. M. & M., vol. 31, p. 464. 4 columns. I.
- GOLD IN THE PHILIPPINES.** By H. G. Ferguson. E. & M. J., vol. 88, p. 1165. 5 columns. I.
- ABOROI DISTRICT, MASBATE, PHILIPPINE ISLANDS.** Min. & Sci. Press, vol. 100, p. 388. 3 columns.
- PARACALE AND MAMBULAO DISTRICTS.** By W. D. Smith. Min. & Sci. Press, vol. 100, p. 453. 4 columns.
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272 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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276 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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- See also **THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.**
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278 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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290 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

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Methods of Handling Mineral and Coal

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See also **PREPARATION OF COAL.**

AN ORE-HANDLING PLANT IN NEW CALEDONIA. E. & M. J., vol. 87, p. 391. 15 columns. I.

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See also **MINE EQUIPMENT.**

Tramming and Mucking

TRAMMING AND MUCKING IN THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 389. 1 column

THE MUCKING PROBLEM IN TUNNELS. By R. L. Herrick. M. & M., vol. 30, p. 98. 2 columns. I.

See **METHODS OF TUNNELING.**

TRAMMING AND MUCKING IN THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 758. ¼ column.

MUCKING IN SHAFT-SINKING. E. & M. J., vol. 85, p. 392. 3 columns.

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See also **OPEN CUT MINING.**

HANDLING ORE UNDERGROUND IN THE GLOBE-KELVIN DISTRICT MINES, ARIZONA. E. & M. J., vol. 89, p. 813. 1½ columns.

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UNDERGROUND HANDLING AND TRANSPORT OF ORE. By C. B. Saner and Geo. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 7. 2 columns.

See also **HAULAGE SYSTEMS.**

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ARRANGEMENT OF PARTINGS IN A COAL MINE: Side Track for Storage

- of Empty and Loaded Cars. By H. J. Nelms. E. & M. J., vol. 90, p. 824. 3 columns. I.
- See also SWITCHES, TURNOUTS, ETC.
- A COAL-LOADING MACHINE. By W. Whaley. M. & M., vol. 31, p. 206. 3½ columns. I.
- A MECHANICAL SUBSTITUTE FOR THE SHOVEL IN COAL MINES. By W. E. Hamilton. E. & M. J., vol. 85, p. 814. 7 columns. I.
- See also COST OF HANDLING AND STORING and COST OF TRAMMING.
- Loading and Unloading Cars and Boats, Etc.**
- LOADING BARGES WITH COAL. T. I. M. E., vol. 36, p. 664. 28 pages. I.
- COAL AND ORE LOADING PLANT, NEW RHINE HARBOR. By J. B. Van Brusel. E. & M. J., vol. 88, p. 763. 7 columns. I.
- SEWALLS POINT COAL PIER. By F. F. Harrington. M. & M., vol. 30, p. 321. 5 columns. I.
- UNLOADING RAILROAD CARS BY MACHINERY. By S. B. Redfield. E. & M. J., vol. 88, p. 605. 10 columns. I.
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- MODERN HOLMEN COALING STATIONS. By C. P. Ross. M. & M., vol. 31, p. 639. 3 columns. I.
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- CHANGES IN IRON ORE SHIPPING PIERS. E. & M. J., vol. 85, p. 1036. 1½ columns.
- THE RAKOWSKY AUTOMATIC UNLOADING ORE CAR. By L. S. Austin. E. & M. J., vol. 88, p. 109. 2 columns. I.
- HANDLING CRUSHED ROCK ON SAN FRANCISCO BAY. By F. K. Blue. E. & M. J., vol. 86, p. 1153. 7 columns. I.
- CONCRETE LOADING PLATFORM FOR LOADING CARS UNDERGROUND. E. & M. J., vol. 88, p. 939. ½ column. I.
- See also USE OF CONCRETE IN MINES.
- Chutes for Loading Cars and Skips**
- STEEL ORE CHUTE FOR USE IN HIGH-GRADE STOPES. E. & M. J., vol. 90, p. 706. ½ column.
- STEEL SKIP LOADING CHUTE. E. & M. J., vol. 90, p. 1292. 1½ columns. I.
- SKIP LOADING CHUTE. E. & M. J., vol. 89, p. 256. ½ column. I.
- UNDERGROUND HOPPER FOR LOADING SKIPS. By T. L. Wittich. E. & M. J., vol. 89, p. 1004. 1½ columns. I.
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- ORE CHUTE: Steel and Wood. E. & M. J., vol. 88, p. 421. 1 column. I.
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WINGED CHUTE IN THE ARGONAUT MINE, CALIFORNIA. E. & M. J., vol. 90, p. 59. 1 column. I.

THE ZUEBLIN SYSTEM OF ORE CHUTES. By A. Gradenwitz. E. & M. J., vol. 90, p. 902. 1½ columns. I.

DEVICE FOR CLEARING A HUNG-UP CHUTE. By J. B. Wilson. E. & M. J., vol. 89, p. 696. 1½ columns. I.

See also COST OF HANDLING AND STORING.

See also ORE BINS, ETC.

Weighing Ore and Coal

AUTOMATIC SCALE FOR WEIGHING COAL. E. & M. J., vol. 87, p. 421. ½ column.

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WEIGHING ORE IN STAMP MILLS. By F. A. Ross. E. & M. J., vol. 86, p. 804. 3 columns. I.

See also STAMP MILL PRACTICE.

Elevators

PECK'S CENTRIFUGAL ELEVATORS. By W. Peck. T. Au. I. M. E., vol. 10, p. 265. 4 pages. I.

GATES' ELEVATORS. Min. & Sci. Press, vol. 96, p. 715. 2½ columns. I.

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DETAILED CONSTRUCTION OF ELEVATORS IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 89, p. 21. 11 columns. I.

CHAT ELEVATOR AND LOADER. E. & M. J., vol. 89, p. 257. 1 column. I.

MECHANICAL ELEVATOR FOR ELEVATING GRAVEL IN MINING. By T. A. Rickard. Min. & Sci. Press, vol. 98, p. 415. 6½ columns. I.

See also HYDRAULIC MINING.

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See also DISPOSAL OF WASTE and CONVEYORS FOR MINERAL AND COAL, also COST OF OPERATING ELEVATORS, ETC.

Storage of Coal and Mineral

BUNKER HILL COAL STORAGE PLANT. By F. W. Brady. M. & M., vol. 31, p. 166. ½ column. I.

See also first volume of INDEX.

HAULAGE IN MINES

Traction Force in Haulage

MINE RESISTANCE. By T. W. Fitch. M. & M., vol. 30, p. 722. 5 columns.

See also first volume of INDEX.

Haulage Systems

THE EVOLUTION OF MINE HAULAGE. By E. B. Wilson. M. & M., vol. 30, p. 683, 11 columns, I.; p. 715, 11 columns, I.

EVOLUTION OF MINE HAULAGE. By E. B. Wilson. M. & M., vol. 30, p. 683, 11½ columns; vol. 31, p. 45, 7½ columns, I.; p. 71, 10½ columns, I.

HAULAGE IN THE CAPE BRETON ISLAND MINES. J. C. M. I., vol. 13, p. 646. 3 pages. I.

THE WABANA MINES AND HAULAGE SYSTEM. By G. A. Gillies. J. C. M. I., vol. 13, p. 632. 8½ pages. I.

DESCRIPTION OF HAULAGE SYSTEM INSTALLED TO TAKE THE PLACE OF HORSES AT NO. 3 AND NO. 4 COLLIERIES OF THE NOVA SCOTIA STEEL AND COAL COMPANY, LTD., AT SYDNEY MINES, NOVA SCOTIA. By J. Johnston. J. M. Soc. N. S., vol. 15, p. 89. 4 pages. I.

HAULAGE AT THE CRESCENT COAL MINE NEAR CALIFORNIA, PENNSYLVANIA. E. & M. J., vol. 89, p. 326. 1½ columns. I.

HAULAGE IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 298. 1 column.

UNDERGROUND HAULAGE IN COAL MINES. E. & M. J., vol. 86, p. 859. 3 columns.

AN UNDERGROUND HAULAGE SYSTEM. By A. H. Fay. E. & M. J., vol. 88, p. 938. 4½ columns. I.

See also **HAULAGE ON INCLINES.**

ARRANGEMENT OF HAULAGE WAYS IN MILLING SYSTEM OF MINING. E. & M. J., vol. 88, p. 920, ½ column, I.; p. 963, ½ column, I.

CHAIN DRIVES. M. & M., vol. 29, p. 31. 1½ columns. I.

ENDLESS ROPE HAULAGE. By H. G. Kay. P. C. M. & M. Soc. S. A., vol. 10, p. 198, 5½ columns, I.; p. 291, 1½ columns, I.; p. 319, 1 column; p. 457, 1 column; p. 254, 3 columns; p. 404, ½ column.

ENDLESS ROPE HAULAGE SYSTEM. M. & M., vol. 31, p. 45. 3½ columns. I.

See also **ELECTRICAL HAULAGE** and **COST OF HAULAGE.**

Animal Haulage

MULE HAULAGE IN FLAT SEAMS. E. & M. J., vol. 86, p. 138. ½ column.

See also **COST OF HAULAGE.**

Haulage on Inclines

GRAVITY PLANTS. By A. W. Evans. M. & M., vol. 29, p. 418. 6½ columns. I.

METHOD OF HAULAGE EMPLOYED IN THE WIND ROCK MINE, TENNESSEE. M. & M., vol. 31, p. 66. 1 column. I.

THE GRAVITY INCLINED PLANE: Graphically Considered. By S. B. Fisher. P. E. Soc. W. Pa., vol. 2, p. 234. 30 columns. D.

THE MOSGROVE INCLINE. By W. L. Affelder. M. & M., vol. 29, p. 278. 2½ columns. I.

THE BOSTON CONSOLIDATED TRAM. By L. S. Cates. M. & M., vol. 30, p. 264. 8 columns. I.

DESIGNING INCLINED HAULAGE PLANTS. By C. Kuderer. E. & M. J., vol. 85, p. 1148. 2 columns.

INCLINED ROOM HAULAGE. E. & M. J., vol. 85, p. 1188. 2 columns. I.

THE "MCGINTY": An Incline Plane for Room Work in Coal Mines. M. & M., vol. 29, p. 464. 2½ columns. I.

SELF-ACTING INCLINES OR "JIGS" IN ROOM WORK. M. & M., vol. 29, p. 491. ½ column. I.

SELF-ACTING TOP FOR GRAVITY PLANE. By H. M. Conner. M. & M., vol. 30, p. 123. 2 columns. I.

THE NORTH STAR GO-DEVIL: a Device for Handling Cars in Stopes of the North Star Mines, Grass Valley, California. E. & M. J., vol. 87, p. 397. ½ column. I.

See also **HAULAGE SYSTEMS** and **ELECTRICAL HAULAGE**, also **COST OF HAULAGE.**

Steam Locomotives

See first volume of **INDEX.**

Compressed Air Haulage

COMPRESSED AIR LOCOMOTIVES FOR MINE HAULAGE. M. & M., vol. 31, p. 72. 2 columns. I.

TWO-STAGE AIR LOCOMOTIVES. M. & M., vol. 31, p. 365. 8½ columns. I.

LOCOMOTIVE HAULAGE IN MINES. M. & M., vol. 31, p. 71. 10 columns. I.

See also **GASOLINE MOTORS, ELECTRICAL HAULAGE** and **COST OF HAULAGE.**

Gasoline Motors

GASOLINE MOTOR HAULAGE. By G. E. Sylvester. M. & M., vol. 31, p. 629. 3 columns. I.

GASOLINE LOCOMOTIVE FOR MINE USE. M. & M., vol. 31, p. 542. 2½ columns. I.

GASOLINE MINE LOCOMOTIVE. M. & M., vol. 31, p. 30. 3 columns. I.

See also **COMPRESSED AIR HAULAGE** and **COST OF HAULAGE.**

Electrical Haulage

LOCOMOTIVE HAULAGE ON THE OVERHEAD TROLLEY SYSTEM. E. & M. J., vol. 89, p. 1237. 1½ columns.

ELECTRIC LOCOMOTIVE FOR MINE HAULAGE. M. & M., vol. 31, p. 72. 6 columns. I.

THE CRAB LOCOMOTIVE IN COAL MINES. E. & M. J., vol. 87, p. 446. 1½ columns.

ELECTRIC MINING LOCOMOTIVE FOR THE CLINCHFIELD CORPORATION. E. & M. J., vol. 88, p. 18. 1½ columns. I.

ELECTRIC LOCOMOTIVE TESTING PLANT. E. & M. J., vol. 85, p. 1067. ½ column. I.

RECENT ELECTRIC LOCOMOTIVES FOR MINE HAULAGE. E. & M. J., vol. 86, p. 26. 2 columns. I.

MOTOR HAULAGE IN FLAT SEAMS. E. & M. J., vol. 86, p. 137. 1 column.

See also **COMPRESSED AIR HAULAGE.**

A NEW STYLE OF AUTOMATIC GATHERING REEL. E. & M. J., vol. 85, p. 319. 1½ columns. I.

STORAGE BATTERY LOCOMOTIVE FOR USE IN MINES. By J. B. Van Brusel. E. & M. J., vol. 89, p. 768. 1½ columns. I.

STORAGE BATTERY EXTENSION TO COLLIERY POWER PLANT. E. & M. J., vol. 90, p. 614. 3 columns. I.

ELECTRIC MOTORS FOR ROPE HAULAGE. By H. W. Reybold. M. & M., vol. 31, p. 174. 1 column. I.

ELECTRIC HAULAGE IN THE PHOENIX, BRITISH COLUMBIA, MINES. E. & M. J., vol. 88, p. 1260. 1 column.

AN ELECTRICALLY OPERATED PLANE. By A. Gradenwitz. M. & M., vol. 30, p. 327. 4 columns. I.

See also **HAULAGE ON INCLINES.**

ELECTRIC ROPE HAULAGE. By W. O. Vickery. M. & M., vol. 30, p. 713. 4 columns. I.

See also **HAULAGE SYSTEMS.**

HALIFAX ELECTRIC TRAMWAY PLANT AND STEAM ENGINEERING. By P. A. Freeman. J. M. Soc. N. S., vol. 11, p. 57. 11½ pages.

DESCRIPTION OF ELECTRIC-HAULAGE PLANT IN OPERATION IN No. 5 COLLIERY, SYDNEY MINES, NOVA SCOTIA. By R. Robertson. J. M. Soc. N. S., vol. 15, p. 93. 9½ pages. I.

SOME RECENT ELECTRICAL WINDING AND HAULAGE PLANTS. By M. B. Mountain. T. I. M. E., vol. 37, p. 385. 27 pages. I.

See also **ELECTRICITY IN THE MINE** and **COST OF HAULAGE.**

Mine Cars: Capacity, Design, Running Gear, Wheels, Etc.

STEEL ORE CAR USED AT THE COPPER QUEEN MINE. M. & M., vol. 30, p. 149. I.

STEEL MINE BUGGY DESIGNED FOR THIN COAL SEAMS. Coal Mining Supplement, E. & M. J., vol. 88, p. 41. 1 column. I.

STEEL CAR FOR COAL MINES: Details of Construction. E. & M. J., vol. 89, p. 451. $\frac{1}{2}$ column. I.

A HANDY CAR. By E. McCormick. Min. & Sci. Press, vol. 96, p. 321. 1 column. I.

CŒUR D'ALENE MINE CAR. E. & M. J., vol. 89, p. 1312. 1 column. I.

OHIO COPPER COMPANY'S SAFETY CARS: Man Car. M. & M., vol. 30, p. 369. $1\frac{1}{2}$ columns. I.

A COMPOSITE MINE CAR. By W. A. Weldin. M. & M., vol. 30, p. 436. $4\frac{1}{2}$ columns. I.

TRAM CAR FOR THE PROSPECTOR: A Horizontal Skid. By G. C. Stoltz. E. & M. J., vol. 89, p. 696. $\frac{1}{2}$ column. I.

SIDE DUMP MINE CAR. By C. T. Rice. E. & M. J., vol. 90, p. 1197. $1\frac{1}{2}$ columns. I.

SIDE-DUMP MINE CAR. Min. & Sci. Press, vol. 101, p. 49. 2 columns. I.

See also **DUMPING DEVICES.**

TRUCK FOR CONVEYING MINERS TO THE WORKING FACE. E. & M. J., vol. 85, p. 1132. $\frac{1}{2}$ column. I.

MINE CAR REGISTER. M. & M., vol. 29, p. 411. $\frac{1}{2}$ column. I.

AN IMPROVED TYPE OF MINE CAR WHEEL. By J. E. Johnson. E. & M. J., vol. 87, p. 1180. 4 columns.

CHILLED CAR WHEELS. By W. A. Sanford. M. & M., vol. 29, p. 326. 1 column. I.

CAR WHEEL FORGING AND CONDITIONS OF STEEL FOR HIGH SERVICE. By J. H. Baker. P. E. Soc. W. Pa., vol. 25, p. 165. 25 $\frac{1}{2}$ pages. I.

SANFORD-DAY SPRING DRAWBAR. M. & M., vol. 30, p. 545. 2 columns. I.

See also **COST OF MINE AND MILL CONSTRUCTION** and **COST OF TRANSPORTATION.**

Wheelbarrows

See first volume of **INDEX.**

Sheaves, Couplings, Clips, Drums, Etc.

DRUMS FOR GRAVITY PLANES. M. & M., vol. 29, p. 419. 1 column. I.

ROLLERS AND SHEAVES FOR GRAVITY PLANES. M. & M., vol. 29, p. 421. $\frac{1}{2}$ column.

COAL CAR COUPLINGS. E. & M. J., vol. 85, p. 1206. $\frac{1}{2}$ column. I.

SELF-ACTING CABLE CLAMP. E. & M. J., vol. 85, p. 1242. $1\frac{1}{2}$ columns. I.

Mine Roads, Tracks, Etc.

MINE TRACK. By E. B. Wilson. M. & M., vol. 31, p. 408. $3\frac{1}{2}$ columns. I.

RAIL BONDING IN MINES. By V. Rhea. M. & M., vol. 31, p. 673. 2 columns. D.

STEEL TIES FOR MINE USE. M. & M., vol. 29, p. 217. $\frac{1}{2}$ column. I.

See also **USE OF CONCRETE IN MINES.**

See also **SURFACE SURVEYS, ETC.,** and **UNDERGROUND SURVEYS.**

See also **RAILS, RAIL-SECTIONS, ETC.,** and **COST OF HAULAGE, also COST OF TRANSPORTATION.**

Switches, Turnouts, Turntables, Etc.

A SPRING TRACK SWITCH. M. & M., vol. 29, p. 218. $\frac{1}{2}$ column. I.

A CHEAP AND EFFICIENT SPRING-SWITCH. By S. Clarke. Min. & Sci. Press, vol. 101, p. 231. $\frac{1}{2}$ column. I.

AUTOMATIC SWITCH ARRANGEMENT ON MINE INCLINES. By R. Grimshaw. E. & M. J., vol. 87, p. 952. 1 column. I.

AUTOMATIC DERAILING DEVICES AND CAR STOP. By H. C. Diamon. M. & M., vol. 29, p. 257. 1 column. I.

RUNAWAY CAR STOP. E. & M. J., vol. 85, p. 1252. $\frac{1}{2}$ column. I.

TURNTABLE FOR MINE CARS. E. & M. J., vol. 90, p. 9. $\frac{1}{2}$ column. I.

MINING TURNTABLE. By W. C. Richards. E. & M. J., vol. 90, p. 305. 1 column. I.

HOISTING IN MINING

**Methods of Hoisting, Appliances,
Etc.**

THE EVOLUTION OF HOISTING. By E. B. Wilson. M. & M., vol. 31, p. 153, 8 columns, I.; p. 251, 10½ columns, I.; p. 298, 10 columns, I.; p. 358, 12½ columns, I.

EVOLUTION OF HOISTING. By E. B. Wilson. M. & M., vol. 31, p. 444. 4 columns. I.

DUTIES OF HOISTING ENGINEERS. E. & M. J., vol. 90, p. 603. 1½ columns.

STATIONARY VS. MOVING HOISTING PLANTS. By J. F. Jackson. E. & M. J., vol. 89, p. 521. 3 columns.

HOISTING AT THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 127. 2 pages.

HOISTING AND HAULAGE AT THE NORTH STAR MINE. By W. H. Spaulding. E. & M. J., vol. 85, p. 899. 3 columns. I.

See also **HAULAGE SYSTEMS.**

WINDING MACHINERY ON THE BENDIGO GOLDFIELD. By A. Harkness. T. Au. I. M. E., vol. 8, pt. 2, p. 205. 10 pages. I.

HOISTING COAL IN PENNSYLVANIA. By J. H. Haertter. Coal Mining Supplement, E. & M. J., vol. 88, p. 11. 18½ columns. I.

STEAM WINDING ENGINES IN ENGLISH COAL MINES. By J. Hinton. E. & M. J., vol. 86, p. 1013. 3½ columns.

THREE THOUSAND HORSE POWER WINDING ENGINE. By J. B. Van Brussel. E. & M. J., vol. 87, p. 904. 4 columns. I.

THE HECLA MINE HOIST. By J. C. McQuiston. M. & M., vol. 31, p. 28. 2 columns. I.

ORE-HOISTING APPLIANCES AT THE WHARF OF THE TYEE COPPER COMPANY, VANCOUVER, BRITISH CO-

LUMBIA. By E. Jacobs. M. & M., vol. 29, p. 499. 2 columns. I.

See also **MINE EQUIPMENT and COST OF HOISTING.**

Calculations for Hoisting Engines

See first volume of **INDEX.**

Speed of Hoisting

TIME OCCUPIED IN WINDING ON THE RAND. T. Au. I. M. E., vol. 5, p. 61. 1½ pages.

SPEED OF HOISTING AT BRITISH COLLIERIES. E. & M. J., vol. 87, p. 224. ¼ column.

SPEED OF HOISTING IN DEEP MINING. P. C. M. & M., Soc. S. A., vol. 9, p. 16, 3 columns; p. 18, 2 columns.

See also **DEEP WINDING.**

RAPID HOISTING. E. & M. J., vol. 86, p. 1010. 1½ columns.

RAPID HOISTING WITH LIGHT EQUIPMENT. By G. A. Packard. Min. & Sci. Press, vol. 95, p. 470. 1 column.

RAPID HOISTING WITH WIRE GUIDE. By H. C. Watson. E. & M. J., vol. 89, p. 1313. 2½ columns. I.

Electric Hoisting

BIBLIOGRAPHY OF ELECTRIC HOISTING. T. A. I. M. E., vol. 41, p. 101. 8 pages.

SYSTEMS OF ELECTRIC HOISTING. T. A. I. M. E., vol. 41, p. 77. 24 pages. D.

FLY-WHEEL MOTOR-GENERATOR SET FOR OPERATING ELECTRIC HOISTS. E. & M. J., vol. 85, p. 1049. 2½ columns. I.

AN ELECTRICALLY OPERATED HOISTING PLANT. By A. Gradenwitz. E. & M. J., vol. 88, p. 74. 8½ columns. I.

TESTS OF AN ILGNER ELECTRIC HOIST.

By R. R. Seeber. T. A. I. M. E., vol. 41, p. 109. 11½ pages. I.

ELECTRIC MINE-HOISTS.

By D. B. Bushmore and K. A. Pauly. T. A. I. M. E., vol. 41, p. 58. 50 pages. I.

ELECTRIC HOISTING IN MINING OPERATIONS.

By S. F. Walker. E. & M. J., vol. 90, p. 1014. 9 columns. I.

ELECTRIC HOISTING AND PUMPING IN THE CRIPPLE CREEK DISTRICT.

By S. A. Worcester. E. & M. J., vol. 87, p. 1057. 1½ columns.

See also **ELECTRICALLY DRIVEN PUMPS.**

SOME RECENT ELECTRICAL WINDING AND HAULAGE PLANTS.

By M. B. Mountain. T. I. M. E., vol. 37, p. 385. 27 pages. I.

See also **ELECTRICAL HAULAGE.**

ELECTRIC HOISTING EQUIPMENT AT WINONA, MICHIGAN.

By R. R. Seeber. E. & M. J., vol. 88, p. 110. 5½ columns. I.

ELECTRIC COLLIERY WINDING IN ENGLAND.

By T. Hinton. E. & M. J., vol. 87, p. 898. 2 columns.

ELECTRIC HOISTS AS ADAPTED FOR COAL MINES.

By R. H. Rowland. E. & M. J., vol. 87, p. 443. 9½ columns. I.

See also **ELECTRICITY IN THE MINE and COUNTERBALANCING IN HOISTING.**

LIFTING MAGNETS. Min. & Sci. Press, vol. 95, p. 755. 2 columns. I.

See also **COST OF HOISTING.**

Pneumatic Hoisting

See **COST OF HOISTING.**

See first volume of INDEX.

Hoisting by Water Power

MINE HOIST OPERATED BY IMPULSE WATER WHEELS. E. & M. J., vol. 85, p. 1137. 6 columns. I.

See also **METHODS OF HOISTING, ETC.**

Gas and Oil Hoisting Engines

See first volume of INDEX.

Deep Winding

THE DESIGN AND EQUIPMENT OF SHAFTS FOR DEEP WINDING. P. C. M. & M. Soc. S. A., vol. 8, p. 161. 1½ columns.

See also **SPEED OF HOISTING** and first volume of INDEX.

Counterbalancing in Hoisting

OVER-BALANCE WEIGHT FOR SINGLE-DRUM HOIST. By S. A. Worcester. E. & M. J., vol. 85, p. 907. 4½ columns. I.

COUNTERBALANCED HOISTING. By R. L. Herrick. M. & M., vol. 29, p. 442. 5 columns. I.

COUNTERBALANCING BY THE KOEPE PULLEY. P. C. M. & M. Soc. S. A., vol. 9, p. 84. 2 columns.

KOEPE DISK AND WHITING HOISTS. T. A. I. M. E., vol. 41, p. 75. 2 pages. D.

COUNTERBALANCING WITH ELECTRIC HOISTS. E. & M. J., vol. 87, p. 443. ½ column.

See also **ELECTRIC HOISTING and METHODS OF HOISTING, ETC.**

Overwinding and Its Prevention

SAFETY DEVICES FOR MINE HOISTS. By U. P. Swineburne. E. & M. J., vol. 85, p. 150. 7 columns. I.

AUTOMATIC THROTTLE-CLOSING DEVICE FOR HOISTING ENGINES. By S. S. Ramsey. M. & M., vol. 29, p. 287. 2 columns. I.

THE PREVENTION OF OVERWINDING. E. & M. J., vol. 85, p. 150. 1½ columns.

DEVICES FOR THE PREVENTION OF OVERWINDING. E. & M. J., vol. 87, p. 1150. 1 column.

See also **PROTECTION IN MINING.**

Hoisting Buckets, Methods of Dumping, Etc.

USING THE ORE BUCKET. By S. A. Worcester. E. & M. J., vol. 89, p. 552. 3 columns. I.

METHOD OF HANDLING SINKING BUCKETS. By W. B. Baggaley. E. & M. J., vol. 89, p. 856. 3 columns. I.

See also BUCKET DUMPS.

Windlasses and Whims for Hoisting

A HANDY WINDLASS. By F. S. Beckett. Min. & Sci. Press, vol. 95, p. 429. $\frac{3}{4}$ column. I.

DETAILS OF A HORSE WHIM. J. C. M. I., vol. 13, p. 628. I.

Cages for Hoisting

CAGE USED IN MARQUETTE RANGE. E. & M. J., vol. 89, p. 647. $\frac{1}{2}$ column. I.

NEW SAFETY CAGE AT MOUNT MORGAN. E. & M. J., vol. 89, p. 649. 1 column. I.

See also PROTECTION IN MINING.

HINGED SHOES FOR CAGES. E. & M. J., vol. 88, p. 421. 1 column. I.

FENCE GATES FOR PIT-CAGES DISCUSSION. T. I. M. E., vol. 36, p. 50. 3 pages.

COLLAPSIBLE GATE FOR CAGES. E. & M. J., vol. 89, p. 1262. 2 columns. I.

Skips for Raising Mineral

SKIPS AND CAGES. By S. A. Worcester. Min. & Sci. Press, vol. 96, p. 486. 3 columns. I.

See also CAGES FOR HOISTING.

SKETCH OF VERTICAL SKIP AS USED AT THE CRESSON MINE. M. & M., vol. 31, p. 738. I.

SKIP FOR HOISTING COAL. E. & M. J., vol. 89, p. 858. 1 column. I.

AUTOMATIC DUMPING SKIP FOR VERTICAL SHAFTS. By G. C. McFarland. E. & M. J., vol. 87, p. 1281. 7 columns. I.

SKIPS REPLACING ORE CHUTES. E. & M. J., vol. 88, p. 1188. 1 column.

See also CHUTES FOR LOADING CARS AND SKIPS.

CRANE FOR CHANGING SKIPS. E. & M. J., vol. 89, p. 5. 1 column. I.

SKIP-CHANGING DEVICES AT BUTTE. By R. L. Herrick. M. & M., vol. 30, p. 359. $4\frac{1}{2}$ columns. I.

WHITFORD-MILLS CHANGING DEVICE. By E. M. Weston. E. & M. J., vol. 90, p. 1195. 1 column. I.

WHITFORD-MILLS SKIP LOADING DEVICE. By E. M. Weston. E. & M. J., vol. 90, p. 1146. 2 columns. I.

See also SKIP DUMPS.

Brakes for Hoists

ELECTRICALLY OPERATED BRAKES FOR INDUSTRIAL PURPOSES. By H. A. Steen. P. E. Soc. W. Pa., vol. 24, p. 385, 24 pages, I.; vol. 25, p. 138, 14 pages.

See also first volume of INDEX.

Drums and Sheaves

REEL-HOISTS: Electric. T. A. I. M. E., vol. 41, p. 66. 6 pages. D.

CONICAL AND CYLINDRO-CONICAL DRUM HOIST. T. A. I. M. E., vol. 41, p. 72. $1\frac{1}{2}$ pages. D.

NOTES ON CERTAIN ALTERATIONS TO A LARGE WINDING-DRUM. By G. P. Hyslop and J. Magee. T. I. M. E., vol. 36, p. 246. $8\frac{1}{2}$ pages. I.

Indicators for Hoists

AN IMPROVED INSTRUMENT FOR RECORDING THE WORKING OF WINDING AND OTHER ENGINES. By A. V. Kochs. T. I. M. E., vol. 38, p. 431. $4\frac{1}{2}$ pages. I.

See also first volume of INDEX.

Shaft Bottom Layouts

SHAFT BOTTOM LAYOUTS. M. & M., vol. 30, p. 460. I.

SHAFT BOTTOM LAYOUTS. E. & M. J., vol. 90, p. 872. Map.

SHAFT BOTTOM ARRANGEMENT, ECCLES NO. 11 MINE, WEST VIRGINIA. M. & M., vol. 29, p. 475. I.

LARGE UNDERGROUND STATION IN A CŒUR D'ALENE MINE. E. & M. J., vol. 90, p. 6. 2 columns. I.

Safety Catches for Mine Cages

SAFETY CATCHES FOR CAGES. E. & M. J., vol. 88, p. 421. $\frac{1}{2}$ column. I.

SAFETY STOP ON GUIDE TIMBERS. E. & M. J., vol. 89, p. 907. 1 column. I.

THE LEH'S SAFETY CLUTCH. E. & M. J., vol. 88, p. 526. 1 column. I.

THE CRAMP SAFETY DEVICE FOR ATTACHING TO MINE CAGES. By E. D. Spencer. T. I. M. E., vol. 36, p. 156. 5 pages. I.

SAFETY CLUTCHES WITH SPECIAL REFERENCE TO THE RUTHVEN CLUTCH. By J. H. Ruthven. T. I. M. E., vol. 38, p. 399. 9 pages.

A NEW SAFETY-CATCH FOR ARRESTING CAGES IN SHAFTS. By J. Harrison and R. Oliver. T. I. M. E., vol. 37, p. 189. 2 pages. I.

A SAFETY DEVICE FOR CAGES AT THE CHAPIN MINE. E. & M. J., vol. 88, p. 745. 1 column. I.

See also PROTECTION IN MINING.

Ropes, Chains, Couplings, Guides, Crossheads, Etc.

SAFETY SINKING HOOKS. By H. Louis. E. & M. J., vol. 85, p. 817. $1\frac{1}{2}$ columns. I.

SAFETY SINKING HOOK. E. & M. J., vol. 86, p. 94. $\frac{1}{2}$ column. I.

SWIVEL HOOK FOR HOISTING. E. & M. J., vol. 89, p. 601. $\frac{1}{2}$ column. I.

ATTACHMENT BETWEEN ROPE AND SINKING BUCKET. By C. B. Brodigan. Min. & Sci. Press, vol. 95, p. 467. 1 column. I.

HOISTING ROPE CONNECTION: Hook and Capping. E. & M. J., vol. 86, p. 185. 1 column. I.

See also CONNECTIONS FOR WIRE ROPES, ETC.

IMPROVEMENTS IN CROSSHEADS FOR SHAFT SINKING. By E. M. Weston. E. & M. J., vol. 85, p. 500. 5 columns. I.

See also SHAFT SINKING.

CHAINS AND CHAIN MAKING. By J. H. Baker. P. E. Soc. W. Pa., vol. 24, p. 221. 20 pages. I.

CHAINS AND CROSS-BARS FOR HANDLING MINE CARS. By O. V. Greene. E. & M. J., vol. 85, p. 316. 9 columns. I.

CROSSHEAD FOR BUCKET HOISTING: The Berry Form. E. & M. J., vol. 85, p. 151. 1 column. I.

BERRY'S SAFETY CROSSHEAD FOR SINKING. E. & M. J., vol. 86, p. 41. 4 columns. I.

SAFETY CROSSHEAD FOR BUCKET SHAFT. E. & M. J., vol. 89, p. 1262. $\frac{1}{2}$ column. I.

See also PROTECTION IN MINING.

SHAFT GUIDES. P. C. M. & M. Soc. S. A., vol. 8, p. 264, $\frac{1}{2}$ column; p. 349, 1 column; vol. 9, p. 17, $\frac{1}{2}$ column, I.

STEEL SHAFT GUIDES. E. & M. J., vol. 86, p. 1010. $\frac{1}{2}$ column. I.

GUIDE AND GUIDE SUPPORTS IN THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 560. I.

See also SHAFT LINING.

SPRING FORMULÆ SIMPLIFIED. By C. B. Albree. P. E. Soc. W. Pa., vol. 24, p. 433. 16 pages. D.

See also COST OF HOISTING and COST OF ROPES.

Cage Keeps, Chairs, Etc.

LANDING CHAIRS FOR MINE CAGE. By J. C. Houston. E. & M. J., vol. 90, p. 7. 1 column. I.

HYDRAULIC LANDING CHAIRS. By M. Clapier. E. & M. J., vol. 88, p. 1233. $2\frac{1}{2}$ columns. I.

CHAIRS ON THE CAGE. E. & M. J., vol. 89, p. 258. $\frac{1}{2}$ column. I.

AN IMPROVED TYPE OF LANDING CHAIRS FOR MINING CAGES. By J. C. Houston. J. C. M. I., vol. 13, p. 464. 3 pages. I.

AN AUTOMATIC ELECTRICAL SYSTEM FOR INDICATING THE POSITION OF "CHAIRS" IN SHAFTS. By W. E. Wainwright. T. Au. I. M. E., vol. 13, p. 61. 4 pages. I.

Shaft-Closing Arrangements

FENCE-GATES FOR WINDING-SHAFT CAGES. By C. A. Crofton. T. I. M. E., vol. 39, p. 8. 4½ pages. I.

SAFETY DEVICE IN LANDINGS. E. & M. J., vol. 86, p. 124. 1 column. I.

See also **PROTECTION IN MINING.**

LABOR IN MINES

General

SINGLE SHIFT. By C. B. Horwood. Min. Mag. London, vol. 4, p. 140. 2 columns.

HANDICAPS OF RIGID WORKING HOURS. E. & M. J., vol. 90, p. 1115. 7½ columns.

EIGHT-HOUR LEGISLATION IN NEVADA AND CALIFORNIA. Min. & Sci. Press, vol. 98, p. 559. 1½ columns.

THE CALIFORNIA EIGHT-HOUR LAW. E. & M. J., vol. 87, p. 1247. 1 column.

THE EIGHT-HOUR BILL AS RELATED TO ENGLISH COAL MINING. By G. R. Dixon. E. & M. J., vol. 85, p. 861. 6 columns.

LABOR WASTING AND LABOR SAVING. By S. A. Worcester. E. & M. J., vol. 89, p. 647. 4 columns.

STANDARDS OF WORK. E. & M. J., vol. 90, p. 302. 3½ columns.

LABOR EFFICIENCY IN MINING OPERATIONS. By P. B. Scotland. E. & M. J., vol. 88, p. 528. 5½ columns.

STEADY-PAY MEN. Min. & Sci. Press, vol. 97, p. 59. ½ column.

THE PROTECTION OF BOY LABOR IN COAL MINES. E. & M. J., vol. 89, p. 732. 1 column.

THE FALSIFICATION OF COAL MINERS' CERTIFICATES. E. & M. J., vol. 88, p. 782. 5½ columns.

CHECK SYSTEM AT THE CABIN BRANCH MINE. E. & M. J., vol. 88, p. 1187. 2 columns.

ELECTRIC RECORDING APPARATUS FOR MINE WATCHMEN. By C. L. C.

Fichlet. E. & M. J., vol. 87, p. 454. 3½ columns. I.

See also **ELECTRICITY IN THE MINE.**

DIAGRAM SHOWING LABOR DISTRIBUTION IN A COLORADO COAL MINE. E. & M. J., vol. 88, p. 1011. D.

LABOR CONDITIONS IN NICARAGUA. T. A. I. M. E., vol. 41, p. 624. 2 pages.

LABOR CONDITIONS IN THE CŒUR D'ALENE. Min. & Sci. Press, vol. 96, p. 192. 3½ columns.

THE RIGHTS OF THE MINER. By T. F. Van Wagenen. Min. & Sci. Press, vol. 96, p. 669. 9½ columns.

WELFARE OF LABORERS IN REDUCTION WORKS. By L. S. Austin. Min. & Sci. Press, vol. 96, p. 489. 7 columns.

SOCIAL CONDITIONS AMONG IRON AND STEEL EMPLOYEES. E. & M. J., vol. 90, p. 1305. 1½ columns.

THE SOCIOLOGICAL SIDE OF THE MINING INDUSTRY. By W. H. Moulton. T. L. S. M. I., vol. 14, p. 82. 16 pages.

THE SOCIOLOGICAL SIDE OF THE MINING INDUSTRY. By W. H. Moulton. E. & M. J., vol. 88, p. 860. 12 columns.

THE SOCIOLOGICAL SIDE OF COAL MINING. By C. R. King. E. & M. J., vol. 88, p. 212. 4 columns. I.

MORAL REVOLUTION IN ANTHRACITE MINING. By P. M. Greer. E. & M. J., vol. 89, p. 1171. 3½ columns.

CO-OPERATIVE COAL MINING IN ENGLAND. E. & M. J., vol. 88, p. 21. $\frac{1}{2}$ column.

CO-OPERATIVE COAL MINING. E. & M. J., vol. 88, p. 780. 2 columns.

CO-OPERATION IN MINING AND GEOLOGY. By U. S. Grant. Min. & Sci. Press, vol. 96, p. 333. 2 columns.

A CO-OPERATIVE GOLD MINE: Miners Operating a Mine. Min. & Sci. Press, vol. 22, p. 88. 1 column.

GAMBLING AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 97, p. 20. 4 columns. I.

THE YAQUI WAR. E. & M. J., vol. 86, p. 123. 5 columns.

See also COST OF LABOR.

Mine Workmen and Labor Problems

THE EMPLOYMENT OF UNSKILLED LABOUR IN MINES AND THE NECESSITY FOR TRAINING TO THE MINER'S OCCUPATION. By J. Hibbard. T. A. I. M. E., vol. 9, p. 64. 11 pages.

A LABOR CHART FOR THE MANAGEMENT OF MINING AND MILLING OPERATIONS. By J. Macdonald. T. A. I. M. E., vol. 39, p. 664. 3 pages. D.

See also MANAGEMENT OF MINES.

THE MINE LABOUR PROBLEM: Wages, Contract or Tribute. By F. D. Power. T. A. I. M. E., vol. 7, p. 121. 17 pages.

WHITE LABOUR IN MINING. By Tom Johnson. P. C. M. & M. Soc. S. A., vol. 9, p. 224, 6 columns; p. 305, 2 $\frac{1}{2}$ columns; p. 389, 2 columns.

WHITE LABOUR IN MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 14. 4 columns.

MANAGEMENT OF LABOR IN RAND MINES. T. A. I. M. E., vol. 39, p. 574. 3 $\frac{1}{2}$ pages. I.

LABOR ON THE RAND. Min. & Sci. Press, vol. 96, p. 814. 1 $\frac{1}{2}$ columns.

LABOR ON THE RAND. T. A. I. M. E., vol. 39, p. 218. 5 $\frac{1}{2}$ pages.

LABOR ON THE RAND. P. C. M. & M. Soc. S. A., vol. 8, p. 265. 2 columns.

THE CHINESE ON THE RAND. By T. L. Carter. T. A. I. M. E., vol. 39, p. 553. 24 $\frac{1}{2}$ pages. I.

THE KAFFIR MINE LABORER. By T. L. Carter. T. A. I. M. E., vol. 39, p. 419. 32 pages. I.

THE CHINAMAN IN MAYLAYA. P. C. M. & M. Soc. S. A., vol. 7, p. 101. 3 columns.

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MINE LABOR AND SUPPLIES IN MEXICO. By M. R. Lamb. E. & M. J., vol. 86, p. 1245. 9 columns. I.

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- FIRST MODERN CHANGE HOUSE IN THE BIRMINGHAM DISTRICT.** E. & M. J., vol. 89, p. 409. 1 column. I.
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- A HOSPITAL EMERGENCY CAR IN ALABAMA COAL MINES.** E. & M. J., vol. 89, p. 1168. 1½ columns.
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Labor Unions

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See also first volume of INDEX.

Miners' Wages

THE INCIDENCE OF METHODS OF PAYMENTS ON THE EFFICIENCY OF MINERS. By K. Austin. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 140, 4½ columns; p. 243, 5 columns; p. 299, 4½ columns; p. 386, 1 column.

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See also CONTRACT SYSTEMS and COST OF LABOR.

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CHAIN LADDERS IN WASTE CHUTES. E. & M. J., vol. 89, p. 1149. ½ column. See first volume of INDEX.

LIFE IN MINES

FUNGUS ON MINE TIMBERS. J. C. M. I., vol. 13, p. 467. 3 pages.

See also first volume of INDEX.

MANAGEMENT OF MINES

Mine Administration

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See also **LEAD AND ZINC ORES.**

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See also LABOR TROUBLES, ETC.

See also COST KEEPING.

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See also COST OF MAINTENANCE AND DEPRECIATION.

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MAPS

Maps of Countries and Districts

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MAPS OF THE COALFIELDS OF THE UNITED STATES. E. & M. J., vol. 87, p. 161. I.

See also **OCCURRENCE OF COAL.**

MAP OF THE BIRMINGHAM IRON-ORE REGIONS OF ALABAMA. T. A. I. M. E., vol. 40, pp. 90 and 91.

SKETCH MAP OF NEVADA. E. & M. J., vol. 87, p. 290. I.

MAP OF MINING DISTRICT OF THE DOMINION OF CANADA. T. I. M. E., vol. 36, pt. 4.

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See also first volume of **INDEX.**

Mine Maps

MAPPING METHODS IN PITTSBURG FIELD. By J. H. Dickerson. M. & M., vol. 30, p. 601. 2½ columns.

THE MAKING OF MINE PLANS. By G. R. Thompson and E. L. Hummel. T. I. M. E., vol. 39, p. 314. 11 pages. I.

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MINE PLANS AND MINE MODELS, WITH SUGGESTIONS FOR, WHY AND HOW THEY MAY BE COMBINED. By N. Dudley. T. A. I. M. E., vol. 1, p. 99. 4½ pages.

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See also **MODELS OF MINES AND MACHINERY.**

MAP OF PRICE-PANCOAST MINE: Two-Entry Pitch Workings. M. & M., vol. 31, p. 617. Map.

PLAN OF COALTON MINE, WEST VIRGINIA. M. & M., vol. 30, p. 190. I.

PLAN OF MINE No. 1, STEARNS COAL COMPANY, STEARNS, KENTUCKY. M. & M., vol. 30, p. 573. Map.

MINE MAP OF A SOUTHERN INDIANA COAL MINE. E. & M. J., vol. 90, p. 871. I.

MINE MAP OF THE MARIANNA. E. & M. J., vol. 86, p. 1163. I.

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See also **METHODS OF MINING COAL, and DEVELOPMENT.**

STOPE MAPS OF THE GRANBY MINES. E. & M. J., vol. 87, p. 255. 1 column.

See also **METHODS OF MINING, ETC., and DEVELOPMENT.**

Geological Maps

GEOLOGICAL MAPPING OF MINE WORKINGS. E. & M. J., vol. 86, p. 385. 2½ columns.

See also **MINE MAPS and MAPS OF COUNTRIES AND DISTRICTS.**

Map Making

See first volume of **INDEX.**

METALLURGICAL METHODS AND PROCESSES

**Metallurgical Processes,
Theory, Etc.**

- SMELTING LOSSES.** E. & M. J., vol. 86, p. 75. 1 column.
- EXTRACTION PERCENTAGES IN METALLURGICAL PLANTS.** By H. A. Magraw. E. & M. J., vol. 89, p. 705. 3½ columns.
- A METHOD OF CALCULATING SLAGS.** By H. Earle. E. & M. J., vol. 87, p. 962. 2 columns.
- CALCULATION OF BLAST-FURNACE CHARGES.** By P. E. Barbour. Min. & Sci. Press, vol. 99, p. 664. 5½ columns. Tables.
- THE USE OF GRAPHIC FORMULE IN METALLURGICAL CALCULATIONS.** By D. H. Browne. J. C. M. I., vol. 10, p. 281. 20 pages. D.
- SLAG REDUCTION.** By J. D. Hubbard. Min. & Sci. Press, vol. 100, p. 223. 2½ columns. I.
- HEATS OF FORMATION OF SOME FERRO-CALCIC SILICATES.** By H. O. Hofman and C. Y. Wen. T. A. I. M. E., vol. 41, p. 495. 8 pages. I.
- HIGH SILICA SLAGS AT THE MAGISTRAL SMELTER.** By C. A. Heberlein. E. & M. J., vol. 88, p. 107, 4 columns; p. 177, 2½ columns.
- SLAG GRANULATION AND EXPLOSIONS.** By R. Hutchinson. E. & M. J., vol. 87, p. 1272. 1 column. I.
- THE MANUFACTURE OF THE SLAGS OF REDUCING FURNACES.** Min. Mag., vol. 2, p. 264. 6 pages. D.
- PEROXIDATION OF IRON IN BLAST FURNACES.** By A. Rigo-Patron. E. & M. J., vol. 88, p. 367. 6 columns.
- THE WESTLY SOTENSEN PROCESS.** By E. P. Jennings. E. & M. J., vol. 86, p. 418. 3½ columns.
- FIFTY YEARS OF SMELTING IN THE WESTERN STATES.** By L. S. Austin. Min. & Sci. Press, vol. 100, p. 753. 4 columns.
- NEW SMELTING FURNACES: The Pils Furnace.** Min. & Sci. Press, vol. 22, 2½ columns. I.
- BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES.** By H. O. Hofman and W. Mostowitsch. E. & M. J., vol. 87, p. 602. 3 columns.
- THE BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES.** By H. O. Hofman and W. Mostowitsch. T. A. I. M. E., vol. 39, p. 628. 25½ pages. I.
- THE BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES.** By H. O. Hofman. T. A. I. M. E., vol. 40, p. 807. 1½ pages.
- FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchar and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.
- METALLURGY OF BROKEN HILL, NEW SOUTH WALES.** By G. W. Williams. E. & M. J., vol. 86, p. 893. 14 columns.
- METALLURGICAL TREATMENT OF MOUNT MORGAN ORES.** By J. B. Wilson. E. & M. J., vol. 87, p. 838. 6 columns. I.
- METALLURGICAL PRACTICE IN WESTERN AUSTRALIA.** By A. E. Drucker. Min. & Sci. Press, vol. 101, p. 401. 9 columns. I.
- METALLURGY ON THE RAND.** By H. G. Nichols. Min. Mag., London, vol. 3, p. 44. 2½ columns. I.
- METALLURGY ON THE RAND.** By T. L. Carter. Min. Mag., London, vol. 1, p. 57. 5½ columns. I.
- METALLURGICAL CONDITIONS AT COBALT.** By F. N. Flynn. Min. & Sci. Press, vol. 97, p. 432. 6 columns. I.
- METALLURGICAL PROGRESS IN COLORADO.** By P. H. Argall. Min. & Sci. Press, vol. 100, p. 35. 12 columns. I.

METALLURGICAL PRACTICE AT HACIENDA DE LA UNION. By F. Narvaez. E. & M. J., vol. 86, p. 989. 9½ columns. I.

SOME METALLURGICAL PROCESSES AT PACHUCA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 559. 13 columns. I.

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METALLURGY IN NICARAGUA. T. A. I. M. E., vol. 41, p. 626. 5 pages.

SMELTING CONDITIONS AT SALT LAKE. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 23. 7 columns. I.

DESCRIPTION OF THE REDUCTION PLANTS AND PROCESSES OF REDUCTION OF WYALONG ORES. By E. Janitzky. T. Au. I. M. E., vol. 9, p. 177. 4 pages.

See also Metallurgy of the Various Metals Under Their Respective Heads and COST OF METALLURGICAL TREATMENT.

Metallurgical Works

THE HENNIG TESTING PLANT AND METALLURGICAL LABORATORY. E. & M. J., vol. 86, p. 1198. 4 columns. I.

THE USES AND ABUSES OF SMALL SMELTING PLANTS. By H. Lang. E. & M. J., vol. 89, p. 455. 9½ columns.

THE LOCATION OF SMELTING WORKS. By R. R. Moore. E. & M. J., vol. 85, p. 546. 2 columns.

THE MOUNT MORGAN METALLURGICAL WORKS. By G. W. Williams. E. & M. J., vol. 87, p. 802. 12 columns. I.

SMALL SMELTING PLANTS IN MEXICO. By R. W. Perry. E. & M. J., vol. 88, p. 658. 5 columns.

REDUCTION WORKS OF BUTTE CITY, MONTANA. By E. D. Peters, Jr. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.

PINE CANYON SMELTER, UTAH. Min. & Sci. Press, vol. 100, p. 639. 2 columns. I.

Methods of Assaying, Calculations, Etc.

SOME NOTES ON ASSAYING. P. C. M. & M. Soc. S. A., vol. 7, p. 270. 3 columns.

MOISTURE AS A SOURCE OF ERROR IN ASSAY REPORTS. By G. A. James. E. & M. J., vol. 90, p. 1047. 1½ columns.

PRACTICAL ASSAYING. Min. Mag., vol. 2, p. 396. 7 pages.

LABOR-SAVING APPLIANCES IN THE ASSAY LABORATORY. By E. Keller. E. & M. J., vol. 90, p. 706. 3½ columns. I.

A PORTABLE ASSAY-OUTFIT FOR FIELD-WORK. By S. K. Bradford. T. A. I. M. E., vol. 41, p. 561. 7 pages.

ROUTINE ASSAYING ON THE RAND. By A. Whitby. P. C. M. & M. Soc. S. A., vol. 6, p. 264, 18½ columns, I.; p. 342, 5½ columns; p. 367, 3½ columns, I.; vol. 7, p. 10, 1 column; p. 33, 5½ columns.

ROUTINE ASSAYING ON A WESTRALIAN MINE. By W. B. Blyth. P. C. M. & M. Soc. S. A., vol. 9, p. 184, 7½ columns; p. 347, 3 columns; p. 393, 2 columns.

NOTES ON ROUTINE MINE SAMPLE ASSAYING. P. C. M. & M. Soc. S. A., vol. 8, p. 54. 2½ columns.

PREPARING AND RECORDING SAMPLES FOR USE IN TECHNICAL ASSAY LABORATORIES. By L. D. Huntoon. T. A. I. M. E., vol. 40, p. 747. 8 pages.

A PORTABLE ASSAY FURNACE. By J. J. Gillio. T. Au. I. M. E., vol. 10, p. 270. 5½ pages. I.

- LABOR-SAVING APPLIANCES IN THE ASSAY-LABORATORY.** By E. Keller. T. A. I. M. E., vol. 41, p. 786. 2 pages. I.
- TWO PORTABLE ASSAY FURNACES.** By E. W. Buskett. E. & M. J., vol. 85, p. 1150. 2 columns. I.
- BALANCES FOR METALLURGICAL WORK.** By A. Austin and S. Hunter. Min. & Sci. Press, vol. 97, p. 224. 4½ columns.
- EFFECT OF BORAX IN ASSAYING.** E. & M. J., vol. 86, p. 656. 1½ columns.
- BORAX IN ASSAY FLUXES.** By J. E. Clennell. E. & M. J., vol. 87, p. 696. 1½ columns.
- ACCURACY IN ASSAYS AND ANALYSES.** By J. W. Howson. Min. & Sci. Press, vol. 99, p. 329. 6 columns.
- CONVERSION TABLES FOR ASSAY VALUATIONS.** P. C. M. & M. Soc. S. A., vol. 9, p. 320. 3 columns.
- METHOD OF PLOTTING MINE-ASSAYS.** By E. H. Nutter. Min. & Sci. Press, vol. 98, p. 727. ½ column. D
- CONVERSION TABLES FOR ASSAY VALUATIONS.** By W. J. Sharwood. M. & M., vol. 29, p. 250. 1½ columns.
- AN ASSAY-PLAN.** By L. F. S. Holland. Min. & Sci. Press, vol. 97, p. 461. 1½ columns. D.
- CRUCIBLE ASSAYS.** By A. A. Steel. E. & M. J., vol. 87, p. 1243. 2½ columns.
- NOTE ON THE INFLUENCE OF FINE CRUSHING ON THE ASSAY VALUE.** By A. Whitby. P. C. M. & M. Soc. S. A., vol. 5, p. 95, 3½ columns; vol. 6, p. 21, 1½ columns.
- GRADING ASSAYS AND GRINDING EFFICIENCIES.** By A. Yates. P. C. M. & M. Soc. S. A., vol. 9, p. 187, 7½ columns; p. 238, 2 columns; p. 346, 3 columns; p. 395, 1½ columns.
- A FURTHER NOTE ON THE INFLUENCE OF FINE CRUSHING AND FUSION ON THE ASSAY VALUE.** P. C. M. & M. Soc. S. A., vol. 6, p. 21. 1½ columns.
- See also **FINE CRUSHING BY MILLS, ETC.**
- MOUNT MORGAN MINE RECORDS AND ASSAY PLANS.** By J. B. Wilson. E. & M. J., vol. 89, p. 710. 8 columns. I.
- CUPELLATION EXPERIMENTS: The Thermal Properties of Cupels.** By C. O. Bannister. T. I. M. & M., vol. 18, p. 439. 27 pages. I.
- CUPELLATION OF SILVER.** E. & M. J., vol. 86, p. 326. 2½ columns.
- TEMPERATURE DURING CUPELLATION.** E. & M. J., vol. 88, p. 919. 1½ columns.
- EXPERIMENTS WITH PORTLAND CEMENT CUPELS.** By T. P. Holt and N. C. Christensen. E. & M. J., vol. 90, p. 560. 5½ columns. D.
- CEMENT VS. BONE-ASH CUPELS.** By J. W. Merritt. Min. & Sci. Press, vol. 100, p. 649. 2 columns. I.
- See also **CEMENT AND CONCRETE, ETC.**
- NOTES ON SMELTING AND CUPELLATION.** By F. L. Piddington. P. C. M. & M. Soc. S. A., vol. 5, p. 8. 1½ columns.
- IMPROVEMENTS IN THE APPLICATION OF WATER COOLED TESTS FOR CUPELLATION.** By E. A. Weinberg. T. A. I. M. E., vol. 7, p. 167. 2 pages. I.
- VOLATILIZATION OF LEAD AND SILVER IN CUPELLATION.** By D. M. Liddell. E. & M. J., vol. 89, p. 1264. 1½ columns.
- ON CUPELLATION AND PARTING IN ORE ASSAYING.** By T. K. Rose. P. C. M. & M. Soc. S. A., vol. 5, p. 165, 5 columns, I.; p. 237, 3 columns; p. 256, 7 columns; vol. 6, p. 49, 1 column.
- A CHEAP PLATINUM PARTING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 9, p. 256. 5 columns. I.
- COMPARISON OF THE THERMAL PROPERTIES OF CUPELS.** By C. O. Bannister and W. N. Stanley. E. & M. J., vol. 88, p. 1167. 8½ columns.

- CONSTRUCTION AND MANIPULATION OF A GASOLINE ASSAY-FURNACE.** By W. E. Dartow. Min. & Sci. Press, vol. 95, p. 749. 3½ columns. I.
- ASSAYING SULPHIDE ORE.** By F. G. Hawley. E. & M. J., vol. 89, p. 1221. 2 columns.
- ASSAY OF BATTERY CHIPS AND SCREENS.** By L. J. Wilmoth. P. C. M. & M. Soc. S. A., vol. 8, p. 230, 5 columns; p. 343, 4 columns; p. 378, 2½ columns.
- QUANTITATIVE BLOW-PIPE ASSAY.** E. & M. J., vol. 85, p. 1111. 1 column.
- ANALYTIC WORK AT COPPER QUEEN SMELTER.** Min. & Sci. Press, vol. 101, p. 147. 2½ columns.
- COMBINATION ASSAY OF COPPER BULLION.** By S. M. Scott. M. & M., vol. 31, p. 240. ¼ column.
- SAMPLING AND ASSAYING THE COPPER ORES OF THE ELY DISTRICT.** By R. Marsh. Sch. Mines Quart., vol. 30, p. 91. 6½ pages.
- METHODS OF ASSAYING IN CYANIDE PLANTS.** E. & M. J., vol. 88, p. 608. 4 columns.
- THE ASSAY OF CYANIDE SOLUTIONS FOR GOLD CONTENT.** By W. F. Boericke. E. & M. J., vol. 88, p. 525. ¼ column.
- ASSAY OF CYANIDE PRECIPITATE.** By F. A. Bird. Min. & Sci. Press, vol. 99, p. 504. 2½ columns.
- ASSAY OF GOLD AND SILVER CYANIDE SOLUTION.** By T. P. Holt. Min. & Sci. Press, vol. 100, p. 863. 1½ columns.
- THE ASSAY OF CYANIDE SOLUTIONS AND SLIME RESIDUE CARRYING DISSOLVED GOLD.** By A. Whitby. P. C. M. & M. Soc. S. A., vol. 10, p. 134, 4½ columns; p. 289, 1½ columns.
- See also CYANIDING GOLD, ETC.
- ASSAY OF TELLURIDE ORES.** E. & M. J., vol. 85, p. 619. 1½ columns.
- COMPARISON OF WET AND CRUCIBLE-FIRE METHODS FOR THE ASSAY OF GOLD TELLURIDE ORES, WITH NOTES ON THE ERRORS OCCURRING IN THE OPERATIONS OF FIRE ASSAY AND PARTING.** By W. F. Hillebrand and E. T. Allen. U. S. G. S., Bull. 253. 31 pages. 1905.
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- BEHAVIOR OF TELLURIUM IN ASSAYING.** E. & M. J., vol. 87, p. 1176. 1½ columns.
- THE BEHAVIOR OF TELLURIUM IN ASSAYING.** By S. W. Smith. T. I. M. & M., vol. 17, p. 463. 19½ pages.
- THE ASSAY OF TELLURIDE ORES.** By G. T. Holloway and E. B. Pearse. T. I. M. & M., vol. 17, p. 171. 40 pages.
- STANDARDIZATION OF BULLION ASSAYS.** M. & M., vol. 31, p. 690. 1½ columns.
- THE INDIAN MINT ASSAY OF SILVER BULLION.** By F. T. C. Hughes. T. I. M. & M., vol. 17, p. 334. 16 pages. I.
- THE ASSAY AND VALUATION OF GOLD BULLION.** By F. P. Dewey. T. A. I. M. E., vol. 40, p. 780. 18 pages.
- NOTES ON THE ASSAY OF GOLD BULLION.** By T. K. Rose. P. C. M. & M. Soc. S. A., vol. 6, p. 36, 5 columns; p. 161, 1½ columns; p. 192, 1 column; p. 248, 2 columns.
- WET ASSAY FOR GOLD.** M. & M., vol. 31, p. 143. ¼ column.
- LIQUID ASSAY OF GOLD.** By R. De Luce. E. & M. J., vol. 89, p. 405. 1 column.
- ASSAYING STAMP MILL BY-PRODUCTS.** E. & M. J., vol. 87, p. 947. 1½ columns.
- WET GOLD ASSAY.** By R. De Luce. Min. & Sci. Press, vol. 100, p. 895. ¼ column.
- ASSAYING FOR GOLD AND SILVER.** Min. & Sci. Press, vol. 22, p. 200. 1½ columns.

- THE FIRE AND WET ASSAY OF SILVER ORES. E. & M. J., vol. 85, p. 269. 2½ columns.
- ASSAYING SILVER BULLION. E. & M. J., vol. 87, p. 942. 1½ columns.
- ASSAYING IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 876. 2½ columns.
- THE EFFECT OF HIGH LITHARGE IN THE CRUCIBLE ASSAY FOR SILVER. By R. W. Lodge. T. A. I. M. E., vol. 38, p. 638. 5½ pages.
- THE FIRE AND WET ASSAY OF SILVER ORES. E. & M. J., vol. 85, p. 661. ½ column.
- ASSAY OF ARSENICAL COBALT SILVER ORES. By D. K. Bullens. E. & M. J., vol. 90, p. 809. 5½ columns. D.
- COMMERCIAL WET LEAD ASSAY. P. C. M. & M. Soc. S. A., vol. 5, p. 158. 1 column.
- ASSAY OF LEAD. E. & M. J., vol. 86, p. 324. ½ column.
- THE ASSAY OF LEAD IN TAILINGS AND SLAGS. By E. W. Buskett. E. & M. J., vol. 90, p. 408. 1½ columns.
- EXPERIMENTS IN FIRE ASSAYING AT THE REDJANG LEBONG MINE, SUMATRA. By G. B. Hogenraad. P. C. M. & M. Soc. S. A., vol. 8, p. 73, 10 columns; p. 150, 2 columns; p. 187, 1½ columns; p. 304, 2½ columns; p. 380, 3 columns.
- NOTES ON THE PRACTICE OF ASSAYING IN BRITISH COLUMBIA. By C. S. Baker. J. C. M. I., vol. 11, p. 443. 7 pages.
- ASSAYING SPELTER. E. & M. J., vol. 85, p. 812. 2½ columns.
- WET ASSAY OF TIN ORES. By J. J. Beringer. Min. Mag., London, vol. 1, p. 231. 3½ columns.
- ASSAY OF TIN ORE. E. & M. J., vol. 85, p. 1112. ½ column.
- ASSAY OF TIN ORES. By G. Hohagen. E. & M. J., vol. 85, p. 422. ½ column.
- WET ASSAY OF TIN ORES. P. C. M. & M. Soc. S. A., vol. 10, p. 376. 2 columns.
- WET ASSAY FOR VANADIUM ORES. E. & M. J., vol. 90, p. 79. ½ column.
- See also DEFINITIONS AND TERMS.
- See also WEIGHTS AND MEASURES and CONCENTRATION.

Metallurgy of Copper

- COPPER SMELTING: The Process as Practiced at the Hafod Works, Swansea. Min. Mag., vol. 10, p. 33. 5 pages.
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- LABORATORY ROUTINE IN MODERN COPPER SMELTERS. By H. T. Waller. T. I. M. & M., vol. 18, p. 37. 22 pages.
- COPPER IN CHLORIDE SOLUTIONS. By G. Fernekas. Min. & Sci. Press, vol. 95, p. 592. 2½ columns.
- MOISTURE IN COPPER BULLION. By D. M. Liddell. E. & M. J., vol. 90, p. 1095. 3½ columns.
- THE BEHAVIOR OF COPPER-SLAGS IN THE ELECTRIC FURNACE. By L. T. Wright. T. A. I. M. E., vol. 41, p. 316. 1½ pages.
- THE GREENAWALT ELECTROLYTIC PROCESS. By W. E. Greenawalt. E. & M. J., vol. 90, p. 1062. 12½ columns. I.
- SECTIONAL SLAG POT. By E. C. Ruder. M. & M., vol. 31, p. 149. ½ column. I.
- THE KILKER MATTE TAPPING CAR. By F. T. Havard. E. & M. J., vol. 87, p. 1294. 3 columns. I.
- SLAG CAR USED AT THE CANANEA SMELTING WORKS. By C. F. Shelby. E. & M. J., vol. 87, p. 204. 3 columns. I.

- A MATTE-SEPARATING FOREHEARTH.** By E. Jacobs. E. & M. J., vol. 87, p. 1232. 2 columns. I.
- MATTE SMELTING AT DENVER.** By H. F. Bain. Min. & Sci. Press, vol. 100, p. 250. 8 columns. I.
- KELLEY SLAG AND MATTE CASTING MACHINE.** By F. G. Kelley. E. & M. J., vol. 86, p. 610. 4 columns. I.
- MATTE SMELTING AT INGOT, CALIFORNIA.** By W. B. Bretherton. E. & M. J., vol. 85, p. 443. 6 columns. I.
- METHOD OF HANDLING MATTE AT SELBY, CALIFORNIA.** By J. C. Bennett. E. & M. J., vol. 85, p. 252. 4 columns. I.
- THE CONSTITUTION OF COPPER-IRON AND COPPER-LEAD-IRON MATTES.** By C. A. Fulton and I. E. Goodner. T. A. I. M. E., vol. 39, p. 584. 35½ pages. I.
- THE PRODUCTION OF CONVERTER-MATTE FROM COPPER-CONCENTRATES BY POT-ROASTING AND SMELTING.** By E. A. Packard. T. A. I. M. E., vol. 38, p. 633. 4½ pages.
- THE CONSTITUTION OF MATTES PRODUCED IN COPPER-SMELTING: Discussion of A. Gibb's and R. C. Philp's Paper.** T. A. I. M. E., vol. 38, p. 913. 2½ pages.
- SINTERING OF COPPER ORES.** By W. G. Perkins. Min. Mag., London, vol. 2, p. 209. 6½ columns.
- SINTERING OF COPPER ORES IN SPAIN.** By H. F. Collins. Min. Mag., London, vol. 1, p. 52. 6 columns. I.
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- THE INFLUENCE OF BISMUTH ON WIRE-BAR COPPER.** By H. N. Lawrie. T. A. I. M. E., vol. 40, p. 604. 10 pages. I.
- THE INFLUENCE OF BISMUTH ON WIRE BAR COPPER.** By H. N. Lawrie. T. A. I. M. E., vol. 40, p. 604. 10 pages. I.
- THE CONSTITUTION OF FERRO-CUPROUS SULPHIDES.** By H. O. Hofman, W. S. Cayless and E. E. Harrington. T. A. I. M. E., vol. 36, p. 142. 12 pages. I.
- THE NEILL PROCESS AT COCONINO, ARIZONA.** By J. W. Neill. E. & M. J., vol. 85, p. 556. 2½ columns.
- THE NEILL PROCESS AT COCONINO, ARIZONA: Leaching with Sulphur Dioxide.** E. & M. J., vol. 85, p. 152. 1½ columns.
- THE JUMAN COPPER LEACHING PROCESS.** E. & M. J., vol. 86, p. 132. 1½ columns.
- COPPER LEACHING PLANT IN THE URAL MOUNTAINS.** By A. L. Simon. T. I. M. & M., vol. 19, p. 212. 30 pages, I.; p. 244, 18 pages.
- PRECIPITATION OF COPPER FROM BUTTE MINE WATER.** By C. J. Stose. E. & M. J., vol. 87, p. 953. 5½ columns. I.
- COPPER LEACHING IN THE URAL MOUNTAINS.** E. & M. J., vol. 89, p. 461. 1½ columns.
- PRECIPITATION OF COPPER FROM CUPIFEROUS WATERS.** By F. H. Probert. Min. & Sci. Press, vol. 96, p. 27. 5½ columns. I.

- A COPPER PRECIPITATING PLANT. By H. W. Chittenden. E. & M. J., vol. 86, p. 853. 4½ columns.
- THE OUTLOOK FOR HYDROMETALLURGY OF COPPER. By W. E. Greenawalt. E. & M. J., vol. 90, p. 960. 9 columns.
- CONSTRUCTION OF 100-TON COPPER SMELTING PLANT. By C. C. Christensen. E. & M. J., vol. 86, p. 847. 10½ columns.
- THE WASHOE REDUCTION WORKS. M. & M., vol. 30, p. 520. 6½ columns. I.
- THE GREAT COBAR SMELTING WORKS. E. & M. J., vol. 85, p. 950. 15½ columns. I.
- WALLEROO AND MOONTA COPPER MINES AND SMELTERY. By G. W. Williams. E. & M. J., vol. 88, p. 54. 14½ columns. I.
- SMELTING WORKS OF TEZINTLAN COPPER COMPANY. By A. van Zwabenburg. E. & M. J., vol. 90, p. 169. 10 columns. I.
- COPPER SMELTING IN SIBERIA. By W. A. Heywood. Min. & Sci. Press, vol. 97, p. 59. 1 column.
- COPPER SMELTING IN THE ARGENTINE. By C. H. Jones. Min. Mag., London, vol. 1, p. 123. 12½ columns. I.
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- THE SMELTER OF THE MAMMOTH COPPER MINING COMPANY, AT KENNETT, CALIFORNIA. By D. F. Campbell. Min. & Sci. Press, vol. 96, p. 30. 3½ columns. I.
- SMELTING COPPER ORES IN SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 396. 6 columns. I.
- THE GRANBY SMELTER EQUIPMENT. By B. L. Sackett. M. & M., vol. 30, p. 524. 8½ columns. I.
- THE GRANBY SMELTER. By R. Keffer. Min. & Sci. Press, vol. 98, p. 256. 3½ columns. I.
- RECENT DEVELOPMENTS AT THE GRANBY SMELTER. By F. E. Lathe. J. C. M. I., vol. 13, p. 273. 15 pages. I.
- CANANEA ORE-BEDDING SYSTEM. By R. L. Herrick. M. & M., vol. 30, p. 65. 9½ columns. I.
- CANANEA FURNACE PRACTICE. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 9. 6½ columns. I.
- COPPER-GOLD SMELTING AT MAGISTRAL, MEXICO. By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE DOUGLAS COPPER SMELTER AT FUNDICION, MEXICO. By P. E. Barbour. E. & M. J., vol. 85, p. 303. 9 columns. I.
- DOUGLAS SMELTING WORKS, FUNDICION, SONORA. By W. P. Tucker. E. & M. J., vol. 86, p. 413. 4½ columns. I.
- PRESENT CONDITION OF THE GARFIELD SMELTING WORKS. By L. S. Austin. Min. & Sci. Press, vol. 99, p. 590. 2½ columns.
- SMELTING PLANT OF THE BUTTE REDUCTION WORKS. By A. H. Wethey. E. & M. J., vol. 88, p. 1153. 7 columns. I.
- THE SMELTERS AT ANACONDA. By E. P. Mathewson. E. & M. J., vol. 86, p. 130. 2 columns.
- THE TAKILMA SMELTER, OREGON. By Geo. Crevar. E. & M. J., vol. 85, p. 365. 1½ columns.
- MINING AND SMELTING AT CERRO DE PASCO, PERU. By C. C. Sample. E. & M. J., vol. 85, p. 206. 12 columns. I.
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- SMELTING WORKS AT RIO BLANCO, PERU. Min. & Sci. Press, vol. 97, p. 465. 2 columns. I.
- SMELTING AT NISHNI TAGIL IN THE URAL MOUNTAINS. By F. W. Draper. E. & M. J., vol. 90, p. 610. 9 columns.

- COPPER SMELTING IN TENNESSEE.** By J. P. Channing. Min. & Sci. Press, vol. 96, p. 97. 1½ columns.
- MINING AND SMELTING IN THE DUCK-TOWN DISTRICT.** By E. Higgins. E. & M. J., vol. 86, p. 1237. 12½ columns. I.
- NOTES ON THE METALLURGY AT COPPERHILL, TENNESSEE.** By G. A. Guess. E. & M. J., vol. 90, p. 866. 2½ columns.
- THE TINTIC SMELTER.** By L. A. Palmer. M. & M., vol. 29, p. 535. 3½ columns. I.
- THE TYEE SMELTER.** By R. L. Phelps. Min. & Sci. Press, vol. 95, p. 782. 3½ columns. I.
- SMELTING PRACTICE OF THE TYEE COPPER COMPANY.** By G. W. Maynard. E. & M. J., vol. 88, p. 905. 11½ columns. I.
- YAMPA SMELTER, BINGHAM, UTAH.** By L. A. Palmer. Min. & Sci. Press, vol. 99, p. 225. 6½ columns. I.
- THE YAMPA SMELTER AT BINGHAM, UTAH.** By L. A. Palmer. M. & M., vol. 31, p. 14. 8½ columns. I.
- THE INTERNATIONAL SMELTER AT TOOEE, UTAH.** E. & M. J., vol. 90, p. 1059. 6½ columns. I.
- THE NEW INTERNATIONAL SMELTER AT TOOEE, UTAH.** By J. Tyssowski. E. & M. J., vol. 89, p. 865. 7 columns. I.
- THE TOOEE SMELTER.** By C. M. McGregory. M. & M., vol. 31, p. 321. 5½ columns. I.
- NOTES ON COPPER SMELTING IN THE WEST.** By E. D. Peters. E. & M. J., vol. 88, p. 735. 4 columns.
- See also CONCENTRATION, and THE COPPER TRADE, also COST OF METALLURGICAL TREATMENT.
- Blast Furnace Smelting of Copper**
- PRACTICAL BLAST FURNACE MANAGEMENT.** By Randolph Bolling. E. & M. J., vol. 85, p. 989. 8 columns. I.
- BLAST FURNACE PROGRESS.** By J. Birkinbine. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- A BLAST FURNACE OF OVAL SECTION.** E. & M. J., vol. 87, p. 853. 3½ columns. I.
- SOME MODIFICATIONS IN BLAST FURNACE CONSTRUCTION.** By J. Kennedy. P. E. Soc. W. Pa., vol. 23, p. 1. 14 pages. I.
- BLAST FURNACE STOCK-HANDLING AND CHARGING APPARATUS.** By W. H. Graham. J. M. Soc. N. S., vol. 15, p. 107. 4 pages. I.
- ON THE USE OF RAW COAL IN BLAST FURNACES.** Min. Mag., vol. 8, p. 1.
- TOPS OF COPPER BLAST FURNACES.** By N. H. Emmons. T. A. I. M. E., vol. 41, p. 723. 10 pages. I.
- CIRCULAR COPPER BLAST FURNACES.** By T. E. Lambert. M. & M., vol. 31, p. 20. 6½ columns. I.
- ALUMINA IN COPPER BLAST FURNACE SLAGS.** E. & M. J., vol. 86, p. 1262. 5 columns.
- ROLE OF ALUMINA IN COPPER BLAST FURNACE SLAGS.** By L. G. Smith. E. & M. J., vol. 90, p. 1260. 5½ columns.
- NEW COPPER BLAST FURNACES AT TEZINTLAN SMELTER.** By C. Robinson. E. & M. J., vol. 88, p. 655. 4 columns. I.
- THE CHARGING OF BLAST FURNACES.** By E. H. Messiter. Min. & Sci. Press, vol. 95, p. 528. 8½ columns. I.
- BLAST FURNACES IN THE GRANBY SMELTER.** M. & M., vol. 30, p. 525. 2 columns. I.
- BLAST FURNACES AT THE YAMPA SMELTER, BINGHAM, UTAH.** M. & M., vol. 31, p. 16. 2½ columns.
- THE CANANEA BLAST FURNACE.** By C. F. Shelby. E. & M. J., vol. 85, p. 841. 16 columns. I.
- COPPER BLAST FURNACE SMELTING AT ANACONDA.** By C. Offerhaus. E. & M. J., vol. 88, p. 243. 19 columns. I.

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See also **METALLURGY OF COPPER.**

Pyritic Smelting of Copper

THE DEVELOPMENT OF PYRITIC SMELTING. By R. C. Sticht. T. A. I. M. E., vol. 11, p. 1. 70 pages.

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NEGATIVE RESULTS IN PYRITIC SMELTING. E. & M. J., vol. 85, p. 325. 4 columns; p. 373, 4½ columns.

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Reverberatory Smelting of Copper

REVERBERATORY VS. BLAST FURNACES. By H. P. Collins. E. & M. J., vol. 89, p. 619. 2 columns.

REVERBERATORY COPPER SMELTING. By E. B. Wilson. M. & M., vol. 31, p. 557. 8½ columns. I.

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MAGNETIC OXIDE IN MATTE. By E. L. Larison. E. & M. J., vol. 87, p. 1195. 3 columns.

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OIL-FIRED REVERBERATORY FURNACES. By R. L. Herrick. M. & M., vol. 30, p. 367. 4 columns. I.

BURNING REVERBERATORY ASH AT THE STEPTOE PLANT. By L. Duncan. E. & M. J., vol. 90, p. 1302. 2 columns.

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EXPERIMENTS IN REVERBERATORY PRACTICE AT CANANEA, MEXICO. By L. D. Ricketts. T. I. M. & M., vol. 19, p. 147. 39 pages. I.

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Bessemerizing of Copper Matte

SUCCESSIVE STAGES IN FLAME OF COPPER CONVERTER. By D. M. Levy. E. & M. J., vol. 90, p. 1207. 4 columns.

OPERATION OF AN ANACONDA COPPER CONVERTER. By C. Offerhaus. E. & M. J., vol. 86, p. 747. 17½ columns. I.

THE BEHAVIOR OF COPPER-MATTE AND COPPER-NICKEL MATTE IN THE BESSEMER CONVERTER. By D. H. Browne. T. A. I. M. E., vol. 41, p. 296. 20½ pages. D.

COOLING COPPER CONVERTER SLAGS, By F. C. Kelley. M. & M., vol. 29, p. 78. 2 columns. I.

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RECENT PRACTICE IN COPPER MATTE CONVERTING. By R. R. Moore. E. & M. J., vol. 90, p. 460. 16 columns. I.

THE TREATMENT OF OVERBLOWN CHARGES IN COPPER CONVERTERS. By A. R. McKenzie. E. & M. J., vol. 90, p. 1147. 2½ columns.

MODERN TYPE OF THE BARREL COPPER CONVERTER. By C. F. Shelby. E. & M. J., vol. 88, p. 815. 5 columns. I.

THE VORTEX COPPER CONVERTER. By H. Haas. E. & M. J., vol. 89, p. 972. 6½ columns. I.

BASIC LINED CONVERTERS FOR LEADY COPPER MATTES. By R. R. Moore. E. & M. J., vol. 90, p. 263. 5 columns.

RECENT PATENTS FOR BASIC-LINED COPPER CONVERTERS. By R. H. Vail. E. & M. J., vol. 89, p. 563. 6½ columns. I.

COPPER CONVERTERS WITH BASIC LINING. By R. R. Moore. E. & M. J., vol. 89, p. 1317. 11 columns.

A MACHINE FOR CASTING CONVERTER COPPER. By J. H. Klepinger. E. & M. J., vol. 85, p. 903. 5 columns. I.

RELATIVE ELIMINATION OF IRON, SULPHUR, AND ARSENIC IN BESSEMERIZING COPPER-MATTES. By E. P. Mathewson. T. A. I. M. E., vol. 38, p. 154. 6 pages.

Refining of Copper

ELECTROLYTIC COPPER REFINERY. Min. & Sci. Press, vol. 101, p. 75. 1½ columns.

ELECTROLYTIC REFINING OF COPPER. By G. H. Blakemore. M. & M., vol. 30, p. 648. 8½ columns. I.

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A STUDY IN REFINING AND OVERPOLING ELECTROLYTIC COPPER. By H. O. Hofman, R. Hayden, and H. B. Hallowell. T. A. I. M. E., vol. 38, p. 171. 24 pages. I.

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EFFECT OF TEMPERATURE ON THE ELECTROLYSIS OF COPPER. E. & M. J., vol. 86, p. 755. 2 columns.

See also **COST OF METALLURGICAL TREATMENT.**

Electro-Metallurgy

ELECTRIC SMELTING OF ORE AT HEROULT, CALIFORNIA. By J. Tysowski. E. & M. J., vol. 90, p. 269. 8½ columns. I.

ELECTRIC SMELTING WITH THE GIROD FURNACE. By W. Borchers. E. & M. J., vol. 88, p. 1113. 13½ columns. I.

ELECTRIC SMELTING IN SWEDEN. By E. J. Ljungberg. M. & M., vol. 30, p. 288. 2½ columns. I.

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THE POSITION OF THE ELECTRIC FURNACE. By P. McN. Bennie. E. & M. J., vol. 88, p. 84. 1½ columns.

ELECTROLYSIS IN METALLURGY OF COPPER, LEAD, ZINC, AND OTHER METALS. By C. O. Mailloux. U. S. G. S., Mineral Resources, 1882, vol. 17. 32 pages.

THE STASSANO ELECTRIC FURNACE. By F. C. Perkins. M. & M., vol. 29, p. 277. 2 columns. I.

RECENT IMPROVEMENTS IN ELECTROLYTIC CELLS. By H. S. Renaud. E. & M. J., vol. 85, p. 405. 3½ columns. I.

NEW RESISTANCE AND INDUCTION FURNACES. By A. Gradenwitz. E. & M. J., vol. 87, p. 364. 3½ columns. I.

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Glass Making

HISTORY OF GLASS MAKING. By G. A. Macbeth. P. E. Soc. W. Pa., vol. 23, p. 625. 21 pages. D.

QUESTIONS ARISING IN THE MAKING OF GLASS. By R. L. Frink. P. E. Soc. W. Pa., vol. 23, p. 646. 10 pages. I.

GLASS MAKING. Min. & Sci. Press, vol. 20, p. 57. 2 columns.

See also OCCURRENCE OF GLASS SANDS.

Metallurgy of Gold and Silver

PREPARATION OF THE ORES OF SILVER-LEAD, AND COPPER, AND THEIR METALLURGICAL TREATMENT AT THE WORKS AT LOZÈRE, FRANCE. By M. Lau. Min. Mag., vol. 7, p. 219, 11½ pages; p. 470, 6 pages.

THE METALLURGICAL TREATMENT OF THE SULPHO TELLURIDE ORES OF KALGOORLIE, WITH SPECIAL REFERENCE TO EXPERIMENTS CONDUCTED AND SULPHIDE MILL ERRECTED ON THE ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED. By L. W. Grayson. T. Au. I. M. E., vol. 7, p. 170, 20 pages; vol. 8, pt. 1, p. 114, 13 pages.

EXTRACTION OF GOLD BY HYPOSULPHITE OF SODIUM, AND ROASTING ORE FOR CYANIDING. By E. Janitzky. T. Au. I. M. E., vol. 7, p. 99. 3 pages.

THE SOLUBILITY OF GOLD IN THIOSULPHATES AND THIOCYANATES. By H. A. White. P. C. M. & M., Soc. S. A., vol. 6, p. 109, 4½ columns; p. 197, 1 column; p. 225, 2 columns; p. 274, 1½ columns.

ON THE LIXIVIATION OF AN AURIFEROUS ARSENOPIRYTE CONCENTRATE. By T. T. Fulton. J. M. Soc. N. S., vol. 10, p. 97. 27½ pages. D.

THIOCARBANIDE: A New Solvent for Gold. By J. Moir. P. C. M. & M. Soc. S. A., vol. 6, p. 332. 9 columns.

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Smelting Gold and Silver

BLAST FURNACE GASES IN SILVER-LEAD SMELTING. By L. S. Austin. Min. & Sci. Press, vol. 97, p. 364. 1½ column.

HEAT OF FUSION OF SILVER-LEAD BLAST FURNACE SLAG. By L. S. Austin. Min. & Sci. Press, vol. 96, p. 567. ½ column.

CALCULATION OF A SILVER-LEAD BLAST FURNACE CHARGE. By J. A. Bart. Min. & Sci. Press, vol. 101, p. 672, 3 columns; p. 710, 3 columns.

SILVER-LEAD SMELTING IN TASMANIA. By T. Kapp. E. & M. J., vol. 89, p. 727. 3½ columns.

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SMELTER OF PENOLES COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 373. 6 columns. I.

MODERN SILVER-LEAD SMELTING AT LAURIUM, GREECE. By H. F. Collins. E. & M. J., vol. 87, p. 881. 8½ columns. I.

See also **THE METALLURGY OF LEAD.**

CHANCELLORSVILLE GOLD AND SILVER ORE REDUCTION COMPANY. Min. Mag., vol. 9, p. 451. 4 pages.

METALLURGICAL CONDITIONS AT COBALT, ONTARIO, CANADA, 1908. By F. N. Flynn. J. C. M. I., vol. 11, p. 293. 42 pages.

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Cyaniding, Processes, Theory, Etc.

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TABLE FOR STANDARDIZING SUMP SOLUTIONS. By C. W. Hess. Min. & Sci. Press, vol. 101, p. 445. Table.

THE DETERMINATION OF CONSTANTS IN WORKING CYANIDE SOLUTIONS. By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 5, p. 13, 7½ columns; p. 54, 7½ columns.

RAPID ESTIMATION OF PULP IN CYANIDE TANKS. By M. R. Lamb. E. & M. J., vol. 89, p. 160. 2 columns.

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TWO DETERRENTS TO THE DISSOLUTION OF FREE GOLD IN THE CYANIDE PROCESS. By D. Simpson. T. I. M. & M., vol. 17, p. 330. 1 page.

- CYANIDATION OF RAW PYRITIC CONCENTRATES. P. C. M. & M. Soc. S. A., vol. 7, p. 422. $\frac{1}{2}$ column.
- CYANIDATION OF SULPHIDES. By M. N. Colman. Min. & Sci. Press, vol. 101, p. 308. 3 columns.
- RECOVERY OF ZINC FROM SOLUTIONS. M. & M., vol. 30, p. 378. $1\frac{1}{2}$ columns.
- THE LABORATORY IN ITS RELATION TO THE CYANIDE PROCESS. By G. A. Byrn. T. Au. I. M. E., vol. 4, p. 173. $1\frac{1}{2}$ pages.
- THE ELIMINATION OF GOLD BEARING SOLUTION FROM SANDS. By W. A. Caldecott and A. McA. Johnston. P. C. M. & M. Soc. S. A., vol. '8, p. 153. $1\frac{1}{2}$ columns. I.
- OXIDATION AND CYANIDATION. By H. A. Megraw. E. & M. J., vol. 88, p. 645. $4\frac{1}{2}$ columns. D.
- THE DESTRUCTION OF CYANIDE. By J. Moir. P. C. M. & M. Soc. S. A., vol. 10, p. 433. $32\frac{1}{2}$ columns. D.
- CHEMISTRY OF THE BROMO-CYANOGEN PROCESS. By S. H. Warrell. Min. & Sci. Press, vol. 98, p. 356. $2\frac{1}{2}$ columns.
- See also CHEMICAL ANALYSIS IN CYANIDING.
- BROMO-CYANIDING OF GOLD ORES. By E. W. Nardin. Min. & Sci. Press, vol. 97, p. 562. $5\frac{1}{2}$ columns.
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- ACTION OF ALKALINE SOLUTIONS IN CYANIDING. P. C. M. & M. Soc. S. A., vol. 8, p. 281. $2\frac{1}{2}$ columns.
- LIME REACTION IN CYANIDING. By T. P. Holt. M. & M., vol. 31, p. 475. $1\frac{1}{2}$ columns.
- NOTES ON THE ESTIMATION OF CAUSTIC LIME. By E. H. Croghan. P. C. M. & M. Soc. S. A., vol. 8, p. 37, 11 columns; p. 84, $1\frac{1}{2}$ columns; p. 122, 11 columns; p. 145, $\frac{1}{2}$ column; p. 183, 8 columns; p. 206, 6 columns.
- LABORATORY TESTS ON THE USE OF COARSE AND FINE LIME FOR CYANIDING. By W. J. Sharwood. P. C. M. & M., Soc. S. A., vol. 8, p. 293. $9\frac{1}{2}$ columns. D.
- AUTOMATIC ZINC DUST FEEDER. By J. S. Colbath. E. & M. J., vol. 89, p. 453. 2 columns. I.
- A NOVEL WASHING AND LEACHING APPARATUS. By A. Gradenwitz. E. & M. J., vol. 86, p. 227. 2 columns. I.
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- THE KIDNEY PULP DISTRIBUTOR. By C. T. Rice. E. & M. J., vol. 90, p. 1046. $3\frac{1}{2}$ columns. I.
- CYANIDATION WITH THE BROWN VAT. By F. Narvaes. Min. & Sci. Press, vol. 95, p. 689. $1\frac{1}{2}$ columns. I.
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- AGITATION BY COMPRESSED AIR. By F. C. Brown. Min. & Sci. Press, vol. 97, p. 424. $6\frac{1}{2}$ columns. I.

- ASSISTING THE SOLUTION OF GOLD IN THE CYANIDE PROCESS BY COMPRESSED AIR.** By A. F. Crosse. P. C. M. & M. Soc. S. A., vol. 8, p. 36. 1 column.
- See also COMPRESSED AIR IN MINING.
- CYANIDE LIXIVIATION BY AGITATION.** By W. M. Brodie. E. & M. J., vol. 87, p. 695. 3½ columns. I.
- A NEW METHOD OF AGITATING CYANIDE PULPS.** By E. G. Spilsbury. E. & M. J., vol. 89, p. 662. 3 columns.
- METHODS OF PULP AGITATION.** By L. M. Kniffen. Min. & Sci. Press, vol. 100, p. 824. 2½ columns.
- AGITATOR FOR CYANIDE TESTS.** By G. H. Clevenger. Min. & Sci. Press, vol. 98, p. 759. 1 column. I.
- BROWN TYPE OF LABORATORY AGITATOR.** By T. S. Lawlor. Min. & Sci. Press, vol. 99, p. 197. 2½ columns. I.
- COMBINED AGITATOR AND VACUUM-FILTER FOR CYANIDING.** Min. & Sci. Press, vol. 96, p. 459. 1 column. I.
- PRESENT TENDENCIES IN CYANIDE PRACTICE.** By M. R. Lamb. E. & M. J., vol. 90, p. 855. 11½ columns.
- PROGRESS IN CYANIDATION IN 1909.** By A. James. Min. & Sci. Press, vol. 98, p. 47. 13 columns. I.
- IMPROVEMENTS IN THE CYANIDE PROCESS.** By B. MacDonald. Min. & Sci. Press, vol. 100, p. 798. 4 columns. I.
- CYANIDE PRACTICE.** By A. James. Min. & Sci. Press, vol. 100, p. 41. 12 columns. I.
- PROPOSED SIMPLIFICATION OF THE CYANIDE PROCESS.** By B. Mierisch. E. & M. J., vol. 89, p. 1327. 4 columns. I.
- PROGRESS AND DEVELOPMENTS IN CYANIDE PRACTICE.** By M. R. Lamb. E. & M. J., vol. 89, p. 178. 5 columns.
- HISTORY OF CYANIDATION.** By P. Argall. Min. & Sci. Press, vol. 95, p. 655, 5½ columns; p. 682, 6½ columns.
- PROGRESS IN CYANIDATION.** By A. James. E. & M. J., vol. 87, p. 1194. 3 columns.
- NOTES ON CYANIDATION.** By L. D. Bishop. E. & M. J., vol. 87, p. 842. 6½ columns. I.
- IMPROVEMENT IN CYANIDE PRACTICE.** By E. G. Spilsbury. T. A. I. M. E., vol. 41, p. 367. 12 pages. I.
- BEGINNINGS OF CYANIDATION.** By J. McCombie. Min. Mag. London, vol. 4, p. 456. 2 columns.
- DEVELOPMENTS IN CYANIDE PRACTICE.** By P. E. Barbour. M. & M., vol. 31, p. 597. 8 columns. I.
- SOME MODERN METHODS IN ORE TREATMENT BY CYANIDATION.** By E. O. Watt. T. Au. I. M. E., vol. 9, p. 76. 18 pages. I.
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- THE CLANCY PROCESS: Lixiviation Process.** By J. C. Clancy. Min. & Sci. Press, vol. 101, p. 862. 5½ columns.
- THE CLANCY CYANIDE PROCESS.** M. & M., vol. 31, p. 433. 3 columns.
- THE ADAIR-USHER PROCESS.** By A. Adair. P. C. M. & M. Soc. S. A., vol. 8, p. 331, 18½ columns, D.; vol. 9, p. 23, 2 columns; p. 48, 5 columns; p. 94, 5 columns; p. 118, 3 columns; p. 158, 7½ columns.
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- RECENT DEVELOPMENTS IN THE ATTEMPT TO AMEND THE CYANIDE PATENT.** By G. G. Turri. T. Au. I. M. E., vol. 4, p. 195. 20 pages.
- CYANIDATION OF CONCENTRATE.** By F. C. Brown. Min. & Sci. Press, vol. 101, p. 273. 1½ columns.

- CYANIDING CONCENTRATE AT TARACOL, KOREA. By J. D. Hubbard. Min. & Sci. Press, vol. 99, p. 471. 5½ columns.
- NOTES ON THE CYANIDE TREATMENT OF CONCENTRATES. By A. Grothe. E. & M. J., vol. 88, p. 668. 3½ columns. I.
- CYANIDATION OF CONCENTRATES. By A. E. Drucker. Min. & Sci. Press, vol. 100, p. 416. 4½ columns. I.
- NOTE ON THE CYANIDING OF CONCENTRATES BY PERCOLATION. By A. L. Edwards. P. C. M. & M. Soc. S. A., vol. 5, p. 345. 1½ columns.
- LAST DRAININGS. By H. A. White. P. C. M. & M. Soc. S. A., vol. 7, p. 239, 9 columns, D.; p. 329, 4 columns; p. 407, 8 columns, D.; vol. 8, p. 15, 2½ columns.
- A QUICK TREATMENT BY CYANIDE OF "BLACK SANDS." By B. V. Burnett. P. C. M. & M. Soc. S. A., vol. 6, p. 240, 2 columns; p. 277, 1 column; p. 316, 1 column; p. 344, 1½ columns.
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- CONTINUOUS COLLECTION OF SAND FOR CYANIDING. By W. A. Caldecott. Min. & Sci. Press, vol. 99, p. 659. 4 columns.
- THE CONTINUOUS COLLECTION OF SAND FOR CYANIDING. By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 10, p. 43, 2½ columns, I.; p. 142, 2 columns; p. 238, 2½ columns.
- SAND COLLECTING AND WASHING. P. C. M. & M. Soc. S. A., vol. 8, p. 391. 1½ columns.
- See also SAND TREATMENT.
- NOTES ON THE PRECIPITATING EFFECTS OF SUBSTANCES CONTAINING VARIOUS FORMS OF CARBON AND CELLULOSE ON CYANIDE SOLUTIONS CONTAINING GOLD AND SILVER. By A. J. Clark and W. J. Sharwood. P. C. M. & M. Soc. S. A., vol. 10, p. 234, 8 columns; p. 405, 1 column.
- PRECIPITATION FROM CYANIDE SOLUTIONS BY ZINC SHAVINGS AND DUST: A Comparison of Results and Costs. By A. J. Clark. P. C. M. & M. Soc. S. A., vol. 9, p. 222, 3 columns; vol. 10, p. 205, 3 columns.
- EXPERIMENTS ON THE PRECIPITATION OF GOLD FROM CYANIDE SOLUTION BY CARBON IN LIME. By E. H. Croghan. P. C. M. & M. Soc. S. A., vol. 10, p. 391. 5 columns.
- PRECIPITATION OF GOLD BY CARBONACEOUS MATTER. By W. A. Caldecott. Min. & Sci. Press, vol. 98, p. 828. 1½ columns.
- ZINC BOX WHITE PRECIPITATES. By R. F. Coolidge. Min. & Sci. Press, vol. 99, p. 394. 4 columns.
- ELECTRICAL PRECIPITATION FROM CYANIDE SOLUTIONS. E. & M. J., vol. 89, p. 598. 1½ columns.
- ELECTROLYTIC PRECIPITATION. By M. R. Lamb. E. & M. J., vol. 87, p. 705. 2 columns.
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- NOTES ON PRECIPITATION. By M. Smith. P. C. M. & M. Soc. S. A., vol. 9, p. 300. 4½ columns; p. 351, 1½ columns.
- ZINC DUST PRECIPITATION. By A. J. Clark. Min. Mag. London, vol. 4, p. 289. 7½ columns. I.
- ZINC DUST PRECIPITATION AT THE HOMESTAKE MINE. By R. Linton. E. & M. J., vol. 88, p. 199. 1½ columns.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO. By R. Linton. P. C. M. & M. Soc. S. A., vol. 10, p. 60. 2½ columns.
- ZINC DUST PRECIPITATION AT MERCUR, UTAH. E. & M. J., vol. 86, p. 79. 1 column.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO. By Robt. Linton. P. C. M. & M. Soc. S. A., vol. 9, p. 74, 5 columns; p. 165, 3 columns; p. 207, 1½ columns; p. 232, 1 column.

- ZINC BOX PRECIPITATION AT PARRAL, MEXICO.** E. & M. J., vol. 86, p. 122. 1½ columns.
- THE "WHITE PRECIPITATE" OF THE PRECIPITATING BOXES IN THE CYANIDE WORKS.** By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 62, 1 column; p. 75, 8 columns; p. 129, 10½ columns; p. 148, 5½ columns; p. 171, 6 columns; p. 310, 1½ columns.
- DE WILDE PRECIPITATION PROCESS.** By G. Witteveen. M. & M., vol. 31, p. 342. 3½ columns.
- THE TREATMENT OF SLIMES BY CYANIDATION AND ELECTRICAL PRECIPITATION ON MERCURY.** By F. T. Mumford. T. A. I. M. E., vol. 9, p. 96. 10 pages. I.
- CYANIDING SLIME.** By M. R. Lamb. T. A. I. M. E., vol. 40, p. 775. 4½ pages. I.
- SLIME TREATMENT IN CYANIDING.** T. A. I. M. E., vol. 40, p. 768. 6 pages. I.
- CYANIDING SLIME.** T. A. I. M. E., vol. 40, p. 775. 4½ pages. I.
- SETTLING SLIME IN CYANIDE TREATMENT.** P. C. M. & M. Soc. S. A., vol. 9, p. 411. 1 column.
- IMPROVEMENTS IN SLIME TREATMENT.** By M. Torrente. P. C. M. & M. Soc. S. A., vol. 5, p. 46, 6½ columns, I.; p. 83, 1½ columns; p. 100, 1½ columns; p. 127, 3 columns; p. 150, 4 columns; p. 179, 3½ columns.
- NOTES ON IMPROVEMENTS IN THE CYANIDE TREATMENT OF SANDS AND SLIMES.** By C. H. Peard. P. C. M. & M., Soc. S. A., vol. 6, p. 76, 4 columns; p. 194, 2 columns; p. 223, 3 columns; p. 249, 3½ columns.
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- THE TREATMENT OF ACCUMULATED SLIME, AND THE USE OF FILTER PRESSES FOR CLARIFYING SLIME SOLUTION AND BY-PRODUCTS.** By J. D. O'Hara. P. C. M. & M. Soc. S. A., vol. 10, p. 342, 5 columns; p. 403, 2 columns, I.
- TREATMENT OF A CONCENTRATE-SLIME.** By A. E. Drucker. Min. & Sci. Press, vol. 96, p. 458. 5 columns. I.
- THE SEPARATION OF SLIME IN CYANIDE TREATMENT.** By H. G. Nichols. Min. & Sci. Press, vol. 96, p. 563. 7 column. I.
- TREATMENT OF SLIME IN THE CYANIDE PROCESS.** Min. & Sci. Press, vol. 100, p. 798. 4 columns. I.
- SLIME TREATMENT IN CYANIDING.** Min. & Sci. Press, vol. 100, p. 44. 5 columns. I.
- A METHOD OF SETTLING SLIMES, AS APPLIED TO THEIR SEPARATION FROM SOLUTION IN CYANIDE TREATMENT.** By H. G. Nichols. T. I. M. & M., vol. 17, p. 293. 38 pages. I.
- CYANIDE TREATMENT OF SLIME.** P. C. M. & M. Soc. S. A., vol. 10, p. 322. 3½ columns.
- METHOD OF TESTING SLIME.** By G. J. Young. Min. Mag., London, vol. 3, p. 133. 2½ columns. I.
- SLIME TREATMENT BY CYANIDATION.** E. & M. J., vol. 88, p. 688. 5½ columns.
- A PROPOSED NEW SYSTEM FOR THE CYANIDE TREATMENT OF SLIMES.** By F. McCann. E. & M. J., vol. 88, p. 688. 5½ columns.
- CYANIDING SLIMES.** E. & M. J., vol. 89, p. 462. 1½ columns. I.
- ALL-SLIME TREATMENT OF ORE IN CYANIDE PLANTS.** By H. A. McGraw. E. & M. J., vol. 89, p. 319. 5 columns. I.
- CYANIDING SLIMES.** E. & M. J., vol. 89, p. 319. 5 columns. I.
- CYANIDING SLIME: PROCESS.** By E. B. Wilson. M. & M., vol. 29, p. 59. 6 columns. I.
- SLIME TREATMENT IN CYANIDING.** By E. B. Wilson. M. & M., vol. 29, p. 59. 6 columns. I.

- SLIME TREATMENT IN CYANIDING.** M. & M., vol. 29, p. 129, 9 columns, I.; p. 187, 3 columns, I.; p. 224, 6 columns, I.
- SLIMING ORE FOR CYANIDATION.** By M. R. Lamb. Min. & Sci. Press, vol. 95, p. 658. 1½ columns.
- SLIME SETTLING BEFORE CYANIDING.** E. & M. J., vol. 87, p. 837. 3 columns. I.
- ALL-SLIMING.** By E. M. Hamilton. Min. & Sci. Press, vol. 99, p. 255. 5½ columns. I.
- THE CHEMICAL CONTROL OF SLIMES.** By H. E. Ashley. T. A. I. M. E., vol. 41, p. 380. 16 pages. I.
- SLIME TREATMENT AT VARIOUS CYANIDE PLANTS.** Min. & Sci. Press, vol. 95, p. 46. 4½ columns.
- THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT.** By A. Salkinson. P. C. M. & M. Soc. S. A., vol. 7, p. 403, 6 columns; vol. 8, p. 52, 1 column; p. 81, 7½ columns; p. 142, 6½ columns.
- FURTHER NOTES ON THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT.** By A. Salkinson. P. C. M. & M. Soc. S. A., vol. 9, p. 308. 3½ columns.
- PROPOSED PROCESS FOR TREATMENT OF ZINC GOLD SLIMES BEFORE SMELTING.** By C. E. Meyer. P. C. M. & M. Soc. S. A., vol. 6, p. 361, 6 columns; p. 83, 1 column; p. 139, 2 columns.
- THE DORR CONTINUOUS SLIME THICKENER.** M. & M., vol. 30, p. 79. 1½ columns. I.
- SLIME TREATMENT AT KALGOORLIE.** By M. W. von Bernewitz. Min. & Sci. Press, vol. 95, p. 743. 2 columns. I.
- SLIME TREATMENT AT THE SANTA NATALIA MILL.** By C. Shapeley. E. & M. J., vol. 90, p. 358. 4 columns. I.
- ALL-SLIME CYANIDE PROCESS AT HACIENDA DE LA UNION.** E. & M. J., vol. 86, p. 991. 2 columns.
- SLIME TREATMENT AT THE TAJO, ROSARIO MILL, MEXICO.** T. A. I. M. E., vol. 41, p. 345. 11 pages. I.
- SLIME TREATMENT AT THE NORTH STAR MINES, CALIFORNIA.** E. & M. J., vol. 90, p. 410. 1 column.
- FILTER PRESS TREATMENT OF SLIMES.** By H. R. Edmans. T. A. I. M. E., vol. 11, p. 77. 19½ pages. I.
- NOTES ON THE USE OF THE FILTER PRESS FOR CLARIFYING SOLUTIONS.** By S. J. Truscott and A. Yates. P. C. M. & M. Soc. S. A., vol. 7, p. 3, 2½ columns; p. 45, 2 columns; p. 83, 2 columns; p. 269, ½ column; p. 321, 2 columns.
- FILTERING SLIMES.** By E. Parrish. Min. & Sci. Press, vol. 99, p. 493. 2½ columns.
- FILTER PRESS WORK.** M. & M., vol. 31, p. 600. 1 column. I.
- FILTER PRESSING SLIMES.** By M. W. von Bernewitz. Min. & Sci. Press, vol. 101, p. 377. 3 columns.
- FILTER PRESS WORK IN CYANIDING CONCENTRATE.** Min. & Sci. Press, vol. 100, p. 416. 3 columns. I.
- VACUUM FILTRATION.** By A. Nichola. Min. & Sci. Press, vol. 100, p. 395. 2 columns. I.
- FILTER PRESSING.** P. C. M. & M. Soc. S. A., vol. 10, p. 222. ½ column.
- THE FILTER PRESS IN CYANIDING.** By E. B. Wilson. M. & M., vol. 29, p. 129, 9 columns, I.; p. 187, 3 columns, I.; p. 224, 6 columns, I.
- FILTERING SLIMES IN CYANIDING.** Min. & Sci. Press, vol. 95, p. 715. 3 columns. I.
- FILTERING GOLD SLIME.** By E. Jensen. E. & M. J., vol. 87, p. 902. 2 columns. I.
- CONTINUOUS VACUUM-FILTER MACHINE.** By B. Hunt. Min. & Sci. Press, vol. 97, p. 430. 3 columns. I.
- CONTINUOUS SLIME FILTER.** By R. Schorr. Min. & Sci. Press, vol. 97, p. 194. 4 columns. I.

- OLIVER CONTINUOUS FILTER.** By A. H. Martin. Min. & Sci. Press, vol. 99, p. 715. 2 columns. I.
- USE OF THE OLIVER CONTINUOUS FILTER AT THE NORTH STAR MINES, CALIFORNIA.** E. & M. J., vol. 90, p. 411. 1 column. I.
- THE OLIVER FILTER PRESS AT GRASS VALLEY.** E. & M. J., vol. 87, p. 440. $\frac{1}{2}$ column. I.
- THE OLIVER CONTINUOUS FILTER AT MINAS DEL TAJO.** By G. A. Tweedy and R. L. Beals. E. & M. J., vol. 89, p. 506. 5 columns. I.
- THE BURT RAPID CYANIDE FILTER.** By E. Burt. Min. & Sci. Press, vol. 95, p. 717. $3\frac{1}{2}$ columns. I.
- THE BUTTERS' SLIME-FILTER AT THE CYANIDE PLANT OF THE COMBINATION MINES COMPANY, GOLDFIELD, NEVADA.** By M. R. Lamb. T. A. I. M. E., vol. 38, p. 200. 10 pages. I.
- THE BUTTERS' FILTER USED AT THE MONTEZUMA MILL, COSTA RICA.** E. & M. J., vol. 90, p. 716. $\frac{1}{2}$ column.
- THE SWEETLAND FILTER PRESS.** By E. J. Sweetland. E. & M. J., vol. 85, p. 359. 3 columns. I.
- THE HUNT CONTINUOUS SLIME FILTER.** P. C. M. & M. Soc. S. A., vol. 10, p. 295. $1\frac{1}{2}$ columns.
- FILTERING SLIMES BY RIDGEWAY FILTER.** E. & M. J., vol. 86, p. 121. 1 column.
- PRESSURE FILTRATION.** By E. J. Sweetland. Min. & Sci. Press, vol. 99, p. 853. $4\frac{1}{2}$ columns. I.
- THE BLAISDELL PRESSURE FILTER.** Min. & Sci. Press, vol. 95, p. 188. 1 column. I.
- VACUUM SLIME-FILTERS AT GOLDFIELD.** By A. M. Smith. Min. & Sci. Press, vol. 99, p. 65. 2 columns.
- THE FAIRCHILD VACUUM-FILTER.** Min. & Sci. Press, vol. 95, p. 279. 1 column. I.
- VACUUM SLIME-FILTERS.** Min. & Sci. Press, vol. 95, p. 46. $4\frac{1}{2}$ columns.
- IMPROVEMENTS IN THE TREATMENT OF SLIME BY THE VACUUM-FILTER PROCESS.** By A. W. Allen. E. & M. J., vol. 87, p. 1004. 3 columns. I.
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- VACUUM-FILTERING OF SLIME AT WAIHI, NEW ZEALAND.** P. C. M. & M., Soc. S. A., vol. 8, p. 13. 2 columns.
- FILTRATION OF SLIMES AT EL ORO, MEXICO.** By D. L. H. Forbes. E. & M. J., vol. 86, p. 458. $3\frac{1}{2}$ columns. I.
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- SOME SUGGESTIONS ON THE CYANIDING OF TAILINGS.** By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 338, $6\frac{1}{2}$ columns; vol. 6, p. 113, $1\frac{1}{2}$ columns; p. 190, $\frac{1}{2}$ column.
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- CYANIDING AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89, 7 columns. I.
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- CYANIDE PRACTICE AT EL TAJO MILL, JALISCO, MEXICO. E. & M. J., vol. 89, p. 274. 1½ columns. I.

- THE CYANIDE PRACTICE AT THE EL ORO MILL, MEXICO.** E. & M. J., vol. 87, p. 683. 23 columns. I.
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FLUXING OF GOLD SLIMES. By C. E. Mayer. P. C. M. & M. Soc. S. A., vol. 5, p. 168, 4 columns; p. 211, 1½ columns; p. 341, ½ column; vol. 6, p. 17, 1 column.

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Miscellaneous Information

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- SAND BOILS.** By J. J. F. Brand. E. & M. J., vol. 87, p. 457. 3 columns.
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METALS

Iron: Its Alloys, Etc.

THE MANUFACTURE OF ALLOYS OR COMBINATIONS OF METALS. Min. Mag., vol. 8, p. 231. 7 pages.

See also **METALLURGY OF IRON AND STEEL, ETC.**

See first volume of **INDEX.**

Aluminum and Its Properties

USES OF ALUMINUM. By J. T. W. Echwarri. Min. & Sci. Press, vol. 98, p. 424. $5\frac{1}{2}$ columns.

ALUMINIUM: Uses, Sources, Etc. By E. B. Wilson. M. & M., vol. 29, p. 371. $2\frac{1}{2}$ columns.

See also first volume of **INDEX.**

Copper, Mass-Copper, Etc.

THE USES OF COPPER. Min. & Sci. Press, vol. 95, p. 215. 1 column.

MICROSTRUCTURE OF COPPER EXAMINED WITH A NEW ETCHING REAGENT. By R. R. Abbott. E. & M. J., vol. 87, p. 1040. 3 columns. I.

See also OCCURRENCE OF COPPER AND COPPER ORES, and first volume of INDEX.

Gold and Silver: Properties, Fineness, Etc.

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COLLECTING PRECIOUS METAL DUST. E. & M. J., vol. 87, p. 863. 1½ columns. I.

CRYSTALLINE CHARACTER OF THE RAND GOLD. T. I. M. & M., vol. 17, p. 15. 1 page.

PRECIOUS METALS USED IN THE ARTS. E. & M. J., vol. 87, p. 499. 1 column.

See also THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING, and THE OCCURRENCE OF GOLD.

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See also METALLURGY OF GOLD AND SILVER.

Platinum

See also OCCURRENCE OF PLATINUM and first volume of INDEX.

Quicksilver: Its Properties, Etc.

THE USE AND CARE OF MERCURY. Min. & Sci. Press, vol. 95, p. 216. 3½ columns.

See also OCCURRENCE OF QUICKSILVER, and first volume of INDEX.

Tin: Its Properties, Etc.

See also OCCURRENCE OF TIN, AND first volume of INDEX.

Properties of Various Metals.

USES OF ANTIMONY. Min. & Sci. Press, vol. 95, p. 336. ½ column.

See also OCCURRENCE OF ANTIMONY.

THE TECHNICAL APPLICATION OF TITANIUM. E. & M. J., vol. 88, p. 771. 3½ columns.

THE ALLOYS OF GOLD AND TELLURIUM. By T. K. Rose. T. I. M. & M., vol. 17, p. 285. 8 pages.

See also first volume of INDEX.

MINERALS**Mineral Determination and Classification**

WHAT IS A MINERAL? By J. W. Gregory. T. I. M. E., vol. 37, p. 13. 31 pages.

SUGGESTIONS AS TO CLASSIFICATION AND DESCRIPTION OF AUSTRALIAN

USEFUL MINERAL DEPOSITS. By A. Montgomery. T. Au. I. M. E., vol. 3, p. 7. 13 pages.

GUIDE TO THE "SIGHT RECOGNITION" OF SEVENTY IMPORTANT MINERALS. By A. J. Moses. Sch. Mines Quart., vol. 31, p. 355. 26 pages.

- A LIST OF NEW CRYSTAL FORMS OF MINERALS.** By H. P. Whitlock. Sch. Mines Quart., vol. 31, p. 320. 25 pages.
- SIMPLE MINERAL TESTS AND HOW TO MAKE THEM.** P. C. M. & M. Soc. S. A., vol. 10, p. 267. 4½ columns.
- CRYSTALLOGRAPHIC NOTES.** By H. P. Whitlock. Sch. Mines Quart., vol. 31, p. 225. 9½ pages. D.
- THE GNOMONIC PROJECTION FROM A GRAPHICAL STANDPOINT.** By A. F. Rogers. Sch. Mines Quart., vol. 29, p. 24. 9 pages. I.
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- METALLOGRAPHY APPLIED TO ENGINEERING.** By W. Campbell. J. C. M. I., vol. 11, p. 471. 14½ pages. I.
- See also **METALS, and METALLURGY OF VARIOUS METALS.**
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- TESTS FOR COPPER MINERALS.** By E. W. Buskett. M. & M., vol. 31, p. 430. 3 columns.
- PROPERTIES OF GYPSUM.** By F. A. Wilder. M. & M., vol. 30, p. 275. 2 columns.
- THE MICROSTRUCTURE OF NICKELIFEROUS PYRRHOTITES.** By W. Campbell and C. W. Knight. J. C. M. I., vol. 10, p. 274. 6 pages. I.
- RESEARCHES UPON CRIPPLE CREEK TELLURIDES.** Min. & Sci. Press, vol. 99, p. 427. 3½ columns.
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- Value of Ore and Its Determination**
- WHAT IS AN ORE?** By J. F. Kemp. Min. & Sci. Press, vol. 98, p. 419. 8½ columns.
- METHOD OF ESTIMATING WEIGHT OF GOLD IN A QUARTZ SAMPLE.** P. C. M. & M. Soc. S. A., vol. 10, p. 27. ½ column.
- SOME ANALYSES OF MOUNT LYELL ORES, ROCKS, ETC.** By H. Stewart. T. Au. I. M. E., vol. 8, pt. 2, p. 228. 7 pages.
- ORE OF THE PROMONTORIO SILVER-MINE, DURANGO, MEXICO.** T. A. I. M. E., vol. 38, p. 740. 2 pages.
- See also **COST OF ORES AND METALS.**
- Miscellaneous Mineral Occurrence**
- ARSENIC: Its Uses, Etc.** By E. B. Wilson. M. & M., vol. 29, p. 507. 3½ columns.

ANTIMONY: Its Uses, Ores, Methods of Testing, Etc. By E. B. Wilson. M. & M., vol. 29, p. 476. 3½ columns.

BARIUM: Its Uses, Methods of Preparation, Etc. By E. B. Wilson. M. & M., vol. 29, p. 538. 3 columns.

A FULGURITE FROM THE RARITAN SANDS OF NEW JERSEY WITH AN HISTORICAL SKETCH AND BIBLIOGRAPHY OF FULGURITES IN GENERAL. By W. L. Burrows. Sch. Mines Quart., vol. 31, p. 294. 26 pages.

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RADIUM IN ENGLAND. E. & M. J., vol. 87, p. 500. ½ column.

ON SIBIO-TANTALITE, A NEW MINERAL FROM THE STANNIFEROUS GRAVEL AT GREENBUSHES, BUDBURY, WEST AUSTRALIA. By J. J. East. T. Au. I. M. E., vol. 1, p. 139. 3 pages.

SILUNDUM: Silicified Carbon. M. & M., vol. 30, p. 403. 1½ columns. I.

UMBER. P. C. M. & M. Soc. S. A., vol. 8, p. 331. 2 columns.

ON THE OCCURRENCE OF DYSCRASITE IN THE A. B. H. CONSOLS MINE, BARRIER RANGE, NEW SOUTH WALES. By G. Smith. T. Au. I. M. E., vol. 1, p. 103. 5 pages. I.

NOTES ON SOME BROKEN HILL AND OTHER BARRIER MINERALS. By C. W. Marsh. T. Au. I. M. E., vol. 4, p. 138. 22 pages. I.

THE USEFUL MINERALS IN TASMANIA. By A. Montgomery. T. Au. I. M. E., vol. 3, p. 203. 28 pages.

THE MINERALS OF CHILE, SOUTH AMERICA. By J. L. Smith. Min. Mag., vol. 5, p. 371. 11½ pages.

MINERALS FROM THE PEGMATITE VEINS OF RINCON, SAN DIEGO COUNTY, CALIFORNIA. By A. F. Rogers. Sch. Mines Quart., vol. 31, p. 208. 10 pages. I.

Measurement and Weight of Ore

See first volume of INDEX.

Gold and Silver Ores and Minerals

GOLD CRYSTALS. P. C. M. & M. Soc. S. A., vol. 9, p. 182. 2½ columns. I.

GOLD ORES AND THEIR WORKING. Min. Mag., vol. 7, p. 23, 8 pages; p. 265, 11½ pages; p. 344, 12 pages; p. 445, 7½ pages.

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ORES OF THE GOLDFIELD DISTRICT. M. & M., vol. 30, p. 510. 2 columns.

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RICHNESS OF COBALT ORES. By A. R. Ledoux. J. C. M. I., vol. 10, p. 72. 2 pages.

Copper Ores and Minerals

THE CLASSIFICATION OF ORES AT BUTTE. By A. H. Wetthey. M. & M., vol. 29, p. 270. 2½ columns. I.

LAKE SUPERIOR COPPER ORE. M. & M., vol. 30, p. 411. 1½ columns.

Iron Ores, Minerals and Meteorites

THE CLINTON IRON ORE OF ALABAMA. T. A. I. M. E., vol. 40, p. 85. 5 pages. I.

THE ELECTRICAL AND MAGNETIC PROPERTIES OF THE IRON-CARBURETS. By C. Barus and V. Strouhal. U. S. G. S., Bull. 15. 33 pages. 1885.

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Lead and Zinc Ores

See first volume of INDEX.

Nickel Ores and Minerals

See first volume of INDEX.

Salt, Quicksilver, Radium, Sulphur, Asbestos, Amber, Phosphates, Etc.

A NEW MERCURY MINERAL. E. & M. J., vol. 90, p. 598. ½ column.

See first volume of INDEX.

Mica and Its Occurrence

See first volume of INDEX.

Graphite

SOME CHARACTERISTICS OF NATURAL GRAPHITE. By F. S. Hyde. E. & M. J., vol. 85, p. 255. 4 columns.

See first volume of INDEX.

Corundum, Carborundum, Etc.

See first volume of INDEX.

Asphaltum Compounds

See first volume of INDEX.

Origin, Properties and Occurrence of Diamonds

THE CULLIAN DIAMOND. E. & M. J., vol. 87, p. 22. 1½ columns.

THE LEMOINE DIAMOND SCHEME. E. & M. J., vol. 85, p. 354. 2½ columns.

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PRECIOUS STONES: Diamonds. By G. F. Kunz. U. S. G. S., Mineral Resources, 1905.

See first volume of INDEX.

Gems and Precious Stones

See first volume of INDEX.

MINE AND MILL CONSTRUCTION**Design of Structures**

DESIGN OF A MINE PLANT. By J. W. Whitehurst and W. P. Cary. Min. & Sci. Press, vol. 101, p. 202, 7½ columns, I.; p. 239, 7 columns, I.

PRINCIPLES GOVERNING THE DESIGN AND EQUIPMENT OF ENGINEERING BUILDINGS. By W. G. Raymond. P. Soc. P. E. E., vol. 13, p. 146. 9 pages.

DESIGN OF STEEL MILL BUILDING. By F. E. Davidson. J. W. Soc. E., vol. 15, p. 471. 21 pages. I.

WIND BRACING IN BUILDINGS. By A. L. Bobbs. P. E. Soc. W. Pa., vol. 24, p. 279. 24 pages. I.

DISPLACEMENT DIAGRAMS OF FRAMED STRUCTURES BY DEFLECTION ANGLES. By M. S. Falk. Sch. Mines Quart., vol. 29, p. 273. 9½ pages. I.

SOME COMMERCIAL FEATURES OF STRUCTURAL ENGINEERING. By E. Gerber. P. E. Soc. W. Pa., vol. 23, p. 125. 21½ pages.

See also MATERIALS AND METHODS OF CONSTRUCTION.

Materials and Methods of Construction

STRUCTURAL MATERIALS: Fireproofing Problems; Timber and Steel. P. E. Soc. W. Pa., vol. 26, p. 55. 31 pages. I. D.

See also first volume of INDEX.

Mine Building, Shops, Etc.

MILL CONSTRUCTION IN THE JOPLIN DISTRICT. By O. Ruhl. E. & M. J., vol. 86, p. 125. 10 columns. I.

UTILIZING ZINC TAILINGS. By L. L. Wittich. M. & M., vol. 31, p. 601. 5 columns. I.

NEW TYPE OF NATIVE COMPOUND BUILDING OF ALL METALLIC CONSTRUCTION. By C. B. Kingston. P. C. M. & M. Soc. S. A., vol. 8, p. 291, 4½ columns, I.; vol. 9, p. 22, 2 columns; p. 81, 1½ columns.

SURFACE EQUIPMENT AT CLOUAN SHAFT, MINERSVILLE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 90, p. 165. 6 columns. I.

THE FIRE TAX AND WASTE OF STRUCTURAL MATERIALS IN THE UNITED STATES. By H. M. Wilson and J. L. Cochrane. U. S. G. S., Bull. 418. 30 pages. 1910.

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See also **DESIGN OF STRUCTURES and MATERIALS and METHODS OF CONSTRUCTION.**

See also **AMALGAMATION OF GOLD and SILVER and COST OF MINE and MILL CONSTRUCTION.**

Headframes: Wood and Metal Design

HEADFRAME MADE OF ROUND TIMBERS. E. & M. J., vol. 88, p. 159. I.

HEADFRAMES IN THE ANTHRACITE COAL FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, pp. 12, 15, 16 and 17. I.

HEADFRAME USED AT ALLAN SHAFTS, NOVA SCOTIA. J. M. Soc. N. S., vol. 12. p. 22. I.

HEADFRAME AT THE CLOUAN SHAFT, MINERSVILLE, NEW YORK. E. & M. J., vol. 90, p. 167. 1 column. I.

STEEL HEADFRAME, No. 4 SHAFT, MONTREAL MINE. By F. B. Goodman. T. L. S. M. I., vol. 15, p. 209. 2 pages. I.

A PORTABLE SAWHORSE CRANE. By C. C. Brayton. Min. & Sci. Press, vol. 101, p. 168. 2½ columns. I.

See also **METHODS OF HOISTING; APPLIANCES, ETC., and COST OF MINE and MILL CONSTRUCTION.**

Tipples: Methods of Construction and Materials

TIPPLE CONSTRUCTION FOR THE HOMER COAL MINES. J. C. M. I., vol. 13, p. 244. 2 pages. I.

TIPPLE CONSTRUCTION IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 89, p. 159. 2 columns. I.

HINTS ON THE DESIGN AND CONSTRUCTION OF WOODEN TRETTLES. By R. Balfour. Min. & Sci. Press, vol. 95, p. 152. 4½ columns. I.

STEEL TIPPLES AND BINS: Precautions Advisable in Design to Insure Their Preservation at Bituminous Coal Mines and Causes of Deterioration. By W. R. Elliott. M. & M., vol. 29, p. 1. 4½ columns. I.

See also **Ore and Coal Bins, ETC.**

TIPPLE FOR UTAH FUEL COMPANY. M. & M., vol. 30, p. 161. 1 column. I.

MODERN METHODS IN A COAL TIPPLE. By H. Harrison. E. & M. J., vol. 90, p. 370. 18½ columns. I.

DETAILS OF TRESTLE CONSTRUCTION AT THE DELAGUA COAL MINE, COLORADO. M. & M., vol. 29, p. 318. I.

TIPPLE AT THE KELLERMAN No. 2 MINE, ALABAMA. M. & M., vol. 31, p. 204. 2 columns. I.

See also **DESIGN OF STRUCTURES, PREPARATION OF COAL and COST OF MINE and MILL CONSTRUCTION.**

Ore Bins: Materials of Construction and Methods of Calculation

COAL POCKETS. M. & M., vol. 29, p. 1. 4 columns. I.

AN UNDERGROUND ORE POCKET. E. & M. J., vol. 89, p. 599. 1 column. I.

CONSTRUCTION OF THE BOSTON CONSOLIDATED BIN AT FOOT OF TRAM. M. & M., vol. 30, p. 267. 1 column. I.

ORE-POCKET CONSTRUCTION AT ELY, NEVADA. M. & M., vol. 29, p. 80. $\frac{1}{2}$ column.

CIRCULAR STEEL BINS. E. & M. J., vol. 90, p. 301. $\frac{1}{2}$ column.

UNDERGROUND ORE-POCKETS IN THE WHITE BEAR MINE. J. C. M. I., vol. 11, p. 528. I.

AN UNDERGROUND STORAGE POCKET. By S. R. Elliott. M. & M., vol. 30, p. 280. 1 column. I.

UNDERGROUND ORE BIN IN A LAKE SUPERIOR IRON MINE. M. & M., vol. 30, pp. 198, 199. I.

ORE BINS AND GATES IN THE Cœur d' ALENE MILLS. E. & M. J., vol. 88, p. 1206. $\frac{3}{4}$ columns. I.

ORE-BIN GATE. E. & M. J., vol. 90, p. 594. $\frac{1}{2}$ column. I.

GATE FOR LUMP ORE BIN. By G. C. Stoltz. E. & M. J., vol. 89, p. 809. $1\frac{1}{4}$ columns. I.

STEEL ARC CHUTE GATE. E. & M. J., vol. 90, p. 398. 1 column. I.

See also CHUTES FOR LOADING CARS AND SKIPS.

See also TIPPLES: METHODS OF CONSTRUCTION AND MATERIALS, and METHODS OF HANDLING MINERAL AND COAL, and COST OF MINE AND MILL CONSTRUCTION.

Foundations for Buildings and Mine Construction

SUPPORTING POWER OF VARIOUS FOUNDATION SOILS IN TONS PER SQUARE FOOT. Mill Building Construction, p. 16. Table.

EARTH PRESSURES: Retaining Wall Construction. By C. K. Mohler. J. W. Soc. E., vol. 15, p. 765. 64 pages. I.

REMOVABLE FOUNDATION BOLTS. E. & M. J., vol. 89, p. 207. 1 column. I.

FOUNDATIONS FOR RIVER BRIDGE PIERS. By P. F. Brendlinger. P. E. Soc. W. Pa., vol. 2, p. 255. 16 pages. I.

FOUNDATION WORK FOR C. & N. W. RAILROAD BRIDGE ACROSS THE MISSISSIPPI RIVER AT CLINTON, IOWA. By M. Deutsch. Sch. Mines Quart., vol. 30, p. 308. 14 pages. I.

FOUNDATION OF THE GOLDFIELD CONSOLIDATED MILL. By P. E. Barbour. E. & M. J., vol. 87, p. 1173. $9\frac{1}{4}$ columns. I.

FOUNDATION FOR THE NORTHWESTERN RAILWAY TERMINAL BUILDING, CHICAGO. By M. Deutsch. Sch. Mines Quart., vol. 31, p. 219. 5 pages. I.

ALTERING STAMP MILL FOUNDATIONS. E. & M. J., vol. 89, p. 763. 1 column. I.

BATTERY FOUNDATION AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 571. I.

See also STAMP MILL PRACTICE.

WATERPROOF CELLAR CONSTRUCTION. By C. A. MacClure. P. E. Soc. W. Pa., vol. 23, p. 517. 27 pages. I.

RECENT RETAINING WALL PRACTICE. By C. M. Reppert. P. E. Soc. W. Pa., vol. 26, p. 316. 51 pages. I.

ERECTION OF A STEEL CHIMNEY. By J. Hebbard. T. Au. I. M. E., vol. 11, p. 71. 6 pages. I.

See also USE OF CONCRETE IN MINES and COST OF MINE AND MILL CONSTRUCTIONS.

Flumes: Materials of Construction and Design

FLUME CONSTRUCTION ON THE YUKON. J. C. M. I., vol. 11, p. 556. 2½ pages. I.

See also **HYDRAULIC MINING.**

Tanks for Mining Purposes

THE CAPACITY OF CIRCULAR VATS FOR FOOT OF DEPTH. By W. A. Caldwell. P. C. M. & M. Soc. S. A., vol. 10, p. 407. Table.

THE KLONNE TYPE OF HIGH-LEVEL STORAGE TANK. By A. Gradenwitz. E. & M. J., vol. 88, p. 820. 5 columns. I.

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Mine Equipment

AN EMPIRICAL METHOD OF DETERMINING THE MAXIMUM OUTPUT OF A VERTICAL SHAFT, USING A CYLINDRICAL-DRUM WINDER, UNDER GIVEN CONDITIONS. By A. W. Brown. T. I. M. E., vol. 38, p. 622. 23½ pages. I.

OUTSIDE ARRANGEMENTS OF A MODERN COAL MINE. By W. R. Roberts. E. & M. J., vol. 89, p. 426. 10½ columns. I.

DESCRIPTION OF MACHINERY AND PLANT AT WELLESLEY NEW PITS, WEMYSS COLLIERIES. T. I. M. E., vol. 36, p. 594. 6 pages. I.

EQUIPMENT AND METHODS AT THE HECLA MINE, IDAHO. By R. H.

Allen. E. & M. J., vol. 89, p. 311. 8½ columns. I.

SURFACE PLANT AT MODERN COAL MINE. By W. R. Roberts. M. & M., vol. 30, p. 577. 10½ columns. I.

PLANT OF THE UTAH FUEL COMPANY. By A. C. Watts. M. & M., vol. 30, p. 161. 5 columns. I.

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A MODERN MINE AT AUBONÉ IN FRENCH LORRAINE. By E. Walch. E. & M. J., vol. 89, p. 509. 4 columns. I.

OPERATION OF THE SATRE COLLIERY, PENNSYLVANIA. By H. J. Heffner. Coal Mining Supplement, E. & M. J., vol. 88, p. 28. 8 columns. I.

COAL MINING AT HOSMER, BRITISH COLUMBIA. E. & M. J., vol. 87, p. 896. 2 columns.

THE YATESBORO POWER PLANT OF THE COWANSEANNOCK COAL AND COKE COMPANY. By C. M. Means. M. & M., vol. 29, p. 11. 5½ columns. I.

TABER PLANT OF THE CANADA WEST COAL COMPANY, AT TABER, ALBERTA. By W. Roberts. M. & M., vol. 29, p. 74. 3½ columns. I.

HOISTING AND COAL-HANDLING PLANT. By W. G. Flint. M. & M., vol. 30, p. 12. 2 columns. I.

See also **METHODS OF HOISTING, APPLIANCES, ETC., and METHODS OF HANDLING MINERAL AND COAL.**

MINE GASES**Mine Atmosphere and Gases**

CHART OF MINE GASES. By C. Myers. E. & M. J., vol. 85, p. 1100. Table.

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See also **SAFETY LAMPS, TESTING BY SAFETY LAMPS, and DETECTION AND TESTING FOR MINE GASES.**

THE REGULATION OF GAS IN MINE AIR CURRENTS. By J. G. Smyth. E. & M. J., vol. 88, p. 14. 9 columns. I.

DETERMINATION AND REGULATION OF THE PERCENTAGE OF GAS IN MINE AIR-COURSES. By J. G. Smyth. M. & M., vol. 29, p. 555. 6 columns. I.

- WITWATERSRAND MINE AIR: Recent Investigations.** By J. Moir. P. C. M. & M. Soc. S. A., vol. 7, p. 65, 12½ columns; p. 145, 1 column; p. 175, 11 columns; p. 203, 8½ columns; p. 248, 32½ columns.
- ON THE GASES AND VENTILATION OF MINES, MORE PARTICULARLY CAVE MINES.** Min. Mag., vol. 9, p. 316, 6 pages; p. 424, 5 pages.
- MINE GASES IN WESTERN AUSTRALIA.** P. C. M. & M. Soc. S. A., vol. 6, p. 227. 1½ columns.
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- AFTERDAMP IN MINES.** M. & M., vol. 30, p. 173. 2½ columns.
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- See also **MINE EXPLOSIONS.**
- ANALYSES OF SAMPLES OF AIR FROM REPRESENTATIVE MINES IN SCOTLAND.** By T. Gray. T. I. M. E., vol. 39, p. 305. 9 pages. I.
- A CAUSE OF MISLEADING AIR-ANALYSIS.** Min. & Sci. Press, vol. 97, p. 58. 1 column.
- NOTE ON THE CAUSE OF CERTAIN MISLEADING ANALYSES OF AIR.** P. C. M. & M. Soc. S. A., vol. 8, p. 280. 1 column.
- See also **CHEMISTRY: Methods and Practice.**
- PRODUCTION OF CARBON MONOXIDE IN MINE FIRES.** By E. Schulz. Glückauf, Dec. 4, 1909.
- See also **MINE FIRES.**
- PERMISSIBLE QUANTITY OF CARBON MONOXIDE AND CARBON DIOXIDE IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 168, 2½ columns; p. 251, 12 columns.
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- CARBON DIOXIDE.** By M. L. Fuller. U. S. G. S., Mineral Resources, 1905.
- EXPLOSIVE MINE GASES AND DUSTS.** By R. T. Chamberlin. U. S. G. S., Bull. 383. 67 pages. 1909.
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- EARTHQUAKES AND FIREDAMP.** M. & M., vol. 30, p. 252. 2½ columns.
- See also **HEALTH OF MINERS.**
- Gases Resulting from Burning Explosives**
- GASEOUS DECOMPOSITION; PRODUCTS OF BLACK POWDER, WITH SPECIAL REFERENCE TO THE USE OF BLACK POWDER IN COAL MINES.** By C. M. Young. T. A. I. M. E., vol. 41, p. 454. 25½ pages.
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Detection and Testing of Mine Gases

THE LIVERING ELECTRICAL INDICATOR FOR FIREDAMP. E. & M. J., vol. 86, p. 627. $\frac{1}{2}$ column.

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EXAMINING FOR FIREDAMP. By J. Ashworth. M. & M., vol. 30, p. 153. $5\frac{1}{2}$ columns.

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CARBON MONOXIDE DETECTOR. T. I. M. E., vol. 37, p. 587. 1 page. I.

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See also **SAFETY LAMPS** and **TESTING BY SAFETY LAMPS.**

Mine Gases and Barometric Pressure

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Estimation of Quantity of Gases

THE ESTIMATION OF CARBON MONOXIDE IN MINE GAS. By E. H. Weiskopf. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 258, 15½ columns, 1.; p. 307, 1½ columns.

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Mining Law: Its Principles and Applications

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HISTORICAL SKETCH OF MINING LAW. By R. W. Raymond. *U. S. G. S., Mineral Resources* 1883 and 1884, vol. 14. 19 pages.

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See also first volume of INDEX.

Tunnel Rights and Tunnel and Mill Sites

See first volume of INDEX.

Riparian and Water Rights

WATER RIGHTS. E. & M. J., vol. 87, p. 689. $\frac{1}{2}$ column.

See also first volume of INDEX.

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See also **MINING LEASES** and first volume of INDEX.

MINE LIGHTING**Illumination of Mines and Buildings**

ILLUMINATION IN MINES. By L. W. Mayer. E. & M. J., vol. 86, p. 967. 1 column.

ON LIGHTING MINES BY GAS. Min. Mag., vol. 10, p. 229. 1 page.

THE TESTING OF MINER'S OIL. By C. E. Scott. M. & M., vol. 31, p. 764. $5\frac{1}{2}$ columns. I.

THE TESTING OF MINER'S OIL. By C. E. Scott. E. & M. J., vol. 87, p. 511. 1½ columns.

"BLUE GAS": A New Illuminant Used in Germany. By R. Grmshaw. E. & M. J., vol. 87, p. 465. ¾ column.

See also first volume of INDEX.

Electricity for Mine Lighting

INCANDESCENT LAMPS IN COAL MINES. P. C. M. & M. Soc. S. A., vol. 6, p. 142. ½ column.

THE USE OF ELECTRIC LAMPS FOR MINERS, WITH SPECIAL REFERENCE TO THE "FLOAT" LAMP. By M. H. Mills. T. I. M. E., vol. 37, p. 344. 8½ pages. I.

THE HUBBELL ELECTRIC MINE LAMP. M. & M., vol. 31, p. 127. 1½ columns. I.

See also **ELECTRICITY IN THE MINE**, and first volume of INDEX.

See also **SAFETY LAMPS, TESTING BY SAFETY LAMPS AND COST OF LIGHTING.**

Acetylene Gas for Mine Lighting

ACETYLENE LIGHTING. By N. Good-year. Min. & Sci. Press, vol. 95, p. 460. 1½ columns.

ACETYLENE LAMPS UNDERGROUND. E. & M. J., vol. 87, p. 177. ¼ column.

ACETYLENE MINE LAMPS. By A. C. Morrison. Min. & Sci. Press, vol. 98, p. 155. 1½ columns.

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A PORTABLE ACETYLENE MINE LAMP. By E. O. Dane. Min. & Sci. Press, vol. 95, p. 26. ¼ column. I.

See also **COST OF LIGHTING.**

Candles, Etc.

See **COST OF LIGHTING.**

See first volume of INDEX.

Lighting Shafts

See first volume of INDEX.

Safety Lamps and Testing by Safety Lamps

THE WOLF-BOHNS ELECTRIC SAFETY LAMP. By R. Cremer. E. & M. J., vol. 87, p. 898. 1 column.

A NEW TYPE OF ENGLISH SAFETY LAMP. E. & M. J., vol. 89, p. 1173. 1½ columns.

THE PIELER SAFETY LAMP. E. & M. J., vol. 89, p. 1076. ¼ column.

SOME RECENT IMPROVEMENTS IN MINER'S SAFETY LAMPS. By T. R. Stopford. T. I. M. E., vol. 39, p. 800. 4 pages. I.

A SAFETY LAMP GLASS TEST. E. & M. J., vol. 88, p. 781. 1½ columns.

SAFETY LAMP RELIGHTING APPARATUS. By F. C. Perkins. M. & M., vol. 30, p. 696. 2 columns. I.

THE FERRO-CERIUM LIGHTER: For Safety Lamps. E. & M. J., vol. 88, p. 451. 2½ columns.

See also **PROPERTIES OF VARIOUS METALS.**

ELECTRIC SAFETY LAMP EXPERIMENTS AT CAMPHAUSEN, GERMANY. T. I. M. E., vol. 37, p. 693. 2 pages.

A NEW ELECTRIC SAFETY LAMP FOR MINERS. T. I. M. E., vol. 39, p. 804. 1 page. I.

See also **ELECTRICITY FOR MINE LIGHTING** and **ELECTRICITY IN THE MINE.**

SAFETY LAMPS IN THE COAL MINES OF FOREIGN COUNTRIES. E. & M. J., vol. 87, p. 196. 1 column.

SAFETY LAMPS vs. NAKED LIGHTS. E. & M. J., vol. 90, p. 83. 2½ columns.

THE ABOLISHMENT OF SAFETY LAMPS IN THE ALABAMA COAL MINES. E. & M. J., vol. 90, p. 326. 1½ columns.

THE SAFENESS OF VARIOUS TYPES OF SAFETY LAMPS. By J. B. Marsaut. E. & M. J., vol. 88, p. 980. 6½ columns. I.

See also PROTECTION IN MINING.

A STUDY OF LAMP FLAME CAPS. By G. H. Winstanley. M. & M., vol. 30, p. 697. 5½ columns. I.

FIREDAmp CAPS AND THE DETECTION OF FIREDAmp IN MINES BY MEANS OF SAFETY LAMPS. By E. B. Whalley and W. M. Tweedle. T. I. M. E., vol. 38, p. 509. 14 pages. I.

AN APPARATUS TO FACILITATE THE PROLONGED AND CAREFUL STUDY OF GAS-CAPS PRODUCED ON THE FLAME OF AN ORDINARY SAFETY LAMP BY ACCURATELY DETERMINED PERCENTAGES OF FIREDAmp. By G. H. Winstanley. T. I. M. E., vol. 38, p. 235. 10 pages. I.

EQUIPMENT FOR THE STUDY OF FLAME-CAPS AND FOR MISCELLANEOUS EXPERIMENTS ON SAFETY LAMPS. By G. R. Thompson. T. I. M. E., vol. 38, p. 524. 44 pages. I.

See also DETECTION AND TESTING OF MINE GASES.

MINING

General

STATE AID TO MINING. P. C. M. & M. Soc. S. A., vol. 7, p. 381. 3 columns.

See also MINING EDUCATION.

A MODEL COAL MINE IN WESTPHALIA. By W. S. Hall. E. & M. J., vol. 87, p. 1135. 6½ columns. I.

PRACTICAL AND ECONOMICAL MINING. By N. A. Nicholson. J. M. Soc. N. S., vol. 15, p. 83. 5 pages.

MODERN PROGRESS IN MINING AND METALLURGY IN THE WESTERN UNITED STATES. By D. W. Brunton. T. A. I. M. E., vol. 40, p. 543, 19½ pages; Discussion, p. 881, 20½ pages.

See also HISTORY OF MINING.

OBSERVATIONS IN COAL MINES OF EUROPE. By F. Haas. E. & M. J., vol. 89, p. 730. 7½ columns.

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See also MINE ORGANIZATION.

Bureau of Mines

THE BUREAU OF MINES BILL. Min. & Sci. Press, vol. 96, p. 103. 2 columns.

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THE TECHNOLOGIC BRANCH OF THE UNITED STATES GEOLOGICAL SURVEY. By G. S. Rice. M. & M., vol. 29, p. 435. 11 columns. I.

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THE CENSUS SCHEDULES FOR MINES AND QUARRIES. E. & M. J., vol. 88, p. 1183. 3½ columns.

Mine Reports

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BOUNDARIES OF THE UNITED STATES AND OF THE SEVERAL STATES AND TERRITORIES, WITH AN OUTLINE OF THE HISTORY OF ALL IMPORTANT CHANGES OF TERRITORY. By H. Gannett. U. S. G. S., Bull. 171, 142 pages, I., 1900; Bull. 226, 145 pages, I., 1904.

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See also NEVADA.

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See also COLORADO.

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THE COPPER AND IRON REGION OF LAKE SUPERIOR. *Min. Mag.*, vol. 1, p. 261. 7½ pages.

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DISCOVERY OF IRON AND COPPER IN THE LAKE SUPERIOR REGION. *T. L. S. M. I.*, vol. 14, p. 22. 3 pages.

HISTORICAL SKETCH OF COPPER MINING ON LAKE SUPERIOR. By A. Meads. *T. L. S. M. I.*, vol. 14, p. 202. 2 pages. I.

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See also AFRICA.

HISTORY AND REVIEW OF THE NITER INDUSTRY OF CHILE. By M. R. Lamb. *E. & M. J.*, vol. 90, p. 18. 14½ columns. I.

HISTORY OF THE COAL FIELDS OF CHILE. *T. I. M. E.*, vol. 38, p. 31. 3 pages.

See also CHILE.

GOLD MINES OF TIBET. By A. Del Mar. *Min. & Sci. Press*, vol. 100, p. 254. 3½ columns.

THE LED MULE LODGE. *E. & M. J.*, vol. 89, p. 1146. 1 column.

WASHED HIS HOME FOR GOLD: A Curious Incident as to Discovery of Gold. *M. & M.*, vol. 31, p. 677. Note.

See also GENERAL MINING.

Inspection of Mines

DUTIES OF A MINE FOREMAN IN THE BITUMINOUS FIELDS OF PENNSYLVANIA. *M. & M.*, vol. 29, p. 94. ½ column.

MINE INSPECTION. By C. De Kalb. *Min. & Sci. Press*, vol. 99, p. 497. 4 columns.

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ANTHRACITE MINE INSPECTION. By L. M. Evans. *Coal Mining Supplement*, *E. & M. J.*, vol. 88, p. 20. 4½ columns.

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MINE INSPECTION IN GREAT BRITAIN. *M. & M.*, vol. 30, p. 316. 2½ columns.

THE LEGAL DUTIES OF THE FIRE BOSS IN THE BITUMINOUS MINES OF PENNSYLVANIA. *M. & M.*, vol. 29, p. 142. ½ column.

INSPECTION OF COAL PROPERTIES BY SUPERINTENDENTS, ENGINEERS, ETC. *M. & M.*, vol. 29, p. 119. 2½ columns. I.

MINE INSPECTION WITH RESPECT TO CAR ALLOTMENT. By H. B. Douglas. *E. & M. J.*, vol. 88, p. 24. 6½ columns.

See also MINE REGULATION.

Prospecting: Methods of Procedure, Equipping Camping Outfits, Etc.

PROSPECTING FOR PHOSPHATE ROCK.
By F. F. Wilson, Jr. E. & M. J.,
vol. 86, p. 1148. 1 column.

THE PROSPECTOR AND HIS FRIENDS.
Min. & Sci. Press, vol. 95, p. 680.
2 columns. I.

THE AMERICAN PROSPECTOR IN MEXICO AND HIS PROBLEMS. By T. Chase. E. & M. J., vol. 87, p. 694.
2 columns.

SINKING TEST PITS. E. & M. J.,
vol. 88, p. 328. $\frac{1}{2}$ column.

THE VALUE OF SURFACE TRENCHING.
M. & M., vol. 31, p. 686. 1 column.

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By H. W. Hixon. E. & M. J., vol. 88, p. 168. 5 $\frac{1}{2}$ columns.

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PROSPECTING FOR GOLD. M. & M.,
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PROSPECTING IN CHIHUAHUA, MEXICO.
By R. H. Burrows. Min. & Sci. Press, vol. 100, p. 392. 4 columns. I.

A SCIENTIFIC SEARCH FOR A NEW GOLDFIELD By R. T. Hill. E. & M. J., vol. 86, p. 1157. 9 columns. I.

PROSPECTING FOR ORES OF THE GOLDFIELD TYPE. By J. V. Lewis. E. & M. J., vol. 87, p. 1121. 2 $\frac{1}{2}$ columns.

PROSPECTORS AND PROSPECTING IN NEVADA. By R. T. Hill. E. & M. J., vol. 86, p. 1053. 3 $\frac{1}{2}$ columns.

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PROSPECTING IN NICARAGUA. T. A. I. M. E., vol. 41, p. 612. 1 $\frac{1}{2}$ pages.

PROSPECTING FOR SILVER. M. & M.,
vol. 31, p. 289. 2 columns.

PROSPECTING ONTARIO SILVER PROPERTIES. E. & M. J., vol. 89, p. 1153. $\frac{1}{2}$ column.

PROSPECTING POVERTY GULCH CLAIMS.
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See also **AURIFEROUS GRAVELS and HYDRAULIC MINING.**

PROSPECTING FOR COAL. By B. Halberstadt. M. & M., vol. 30, p. 454. 4 $\frac{1}{2}$ columns. I.

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SYSTEMATIC EXPLORATION IN THE PITTSBURG COAL-SEAM. By F. Z. Schellenberg. T. A. I. M. E., vol. 41, p. 225. 12 pages. I.

PROSPECTING DISSEMINATED COPPER ORE DEPOSITS. By C. R. Keyes. E. & M. J., vol. 90, p. 1055. 4 $\frac{1}{2}$ columns.

PROSPECTING IN THE MESABI IRON RANGE. M. & M., vol. 29, p. 293. 2 columns.

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See also **OCCURRENCE OF WORKABLE CLAYS.**

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See also CHINA.

See also PROSPECT DRILLING, and first volume of INDEX, also COST OF PROSPECTING.

Divining

USE OF THE DIVINING ROD. Min. & Sci. Press, vol. 95, p. 500. $\frac{1}{2}$ column.

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MINING DISCOVERY: The Divining Rod. Min. Mag., vol. 10, p. 51. 3 pages.

See also first volume of INDEX.

Value of Mines: Sampling and Estimation of Mines; Ore Reserves, Ore in Sight, Mine Reports, Etc.

THE PROFESSIONAL EXAMINATION OF UNDEVELOPED MINERAL PROPERTIES. By C. Catlett. T. A. I. M. E., vol. 39, p. 774. 8 $\frac{1}{2}$ pages.

TO DETERMINE THE VALUE OF A MINE. Min. Mag., vol. 1, p. 607. 6 pages.

PRESENT VALUE OF MINES. P. C. M. & M. Soc. S. A., vol. 5, p. 185. $\frac{1}{2}$ column.

RATING OF MINES: Principles Involved. E. & M. J., vol. 88, p. 24. 5 columns.

CALCULATION OF MINE-VALUES. By R. B. Brinsmade. T. A. I. M. E., vol. 39, p. 243. 7 pages.

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ORE-VALUATION OF GOLD MINES. T. A. I. M. E., vol. 39, p. 685. 9 pages. I.

See also VALUE OF ORE AND ITS DETERMINATION.

ESTIMATE OF TONNAGE OF ORE AND STRIPPING. M. & M., vol. 29, p. 344. 11 columns.

COMPUTING TONNAGE FROM VOLUME OF ORE REMOVED. By S. L. Lefevre and G. C. Stoltz. E. & M. J., vol. 87, p. 350. $1\frac{1}{2}$ columns. I.

THE VALUATION OF PUBLIC LANDS: The Value of Coal Land. By G. H. Ashley. U. S. G. S., Bull. 424. 75 pages. 1910.

DEPTH AND MINIMUM THICKNESS OF BEDS (COAL) AS LIMITING FACTORS IN VALUATION. By C. A. Fisher. U. S. G. S., Bull. 424. 75 pages. 1910.

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See also AURIFEROUS GRAVELS and HYDRAULIC MINING.

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ORE RESERVES OF WEST AUSTRALIA GOLD MINES. E. & M. J., vol. 90, p. 458. 5½ columns.

ESTIMATES OF ORE RESERVES. T. A. I. M. E., vol. 40, p. 125. 9 pages. I.

THE AUDITING OF ORE RESERVES. By B. I. Collings. P. C. M. & M. Soc. S. A., vol. 5, p. 144, 2 columns; p. 206, 11½ columns; p. 232, 7 columns; p. 309, 1½ columns.

NOTES ON THE ESTIMATION AND VALUATION OF ORE RESERVES. By W. R. Tait. P. C. M. & M. Soc. S. A., vol. 7, p. 198, 10 columns; p. 295, 1½ columns; p. 332, 2 columns; p. 406, 2 columns.

See also BUYING AND SELLING ORE and VALUE OF ORE AND ITS DETERMINATION.

See also DREDGING FOR GOLD AND OTHER MATERIALS.

VALUATION OF MINNESOTA MINERAL LANDS. E. & M. J., vol. 84, p. 558. 1 column.

See also COST OF MINE EXAMINATION.

Permanence in Depth

PERMANENCY IN DEPTH. Min. & Sci. Press, vol. 96, p. 13. 1 column.

RATIO OF VALUE TO DEPTH. Min. & Sci. Press, vol. 101, p. 495. ¼ column.

PERSISTENCE IN DEPTH OF TREADWELL ORES. U. S. G. S., Bull. 259, p. 79. ½ page.

THE FACTORS THAT CONTROL THE DEPTH OF ORE DEPOSITS. By J. W. Gregory. T. Au. I. M. E., vol. 8, pt. 2, p. 127. 28 pages.

LIVES OF MINES. Min. & Sci. Press, vol. 97, p. 456. 2½ columns.

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See also THEORY OF ORE DEPOSITS, ETC., and DEEP MINING, also DEVELOPMENT.

Development: Size, Shape, Depth and Arrangement of Shafts and Slopes

THE NECESSITY OF DISTINGUISHING BETWEEN PROSPECTING, DEVELOPING AND MINING. By R. W. Brock. J. C. M. I., vol. 13, p. 490. 5 pages.

PRELIMINARY DEVELOPMENT WORK. By A. M. Bateman. J. C. M. I., vol. 13, p. 621. 10½ pages. I.

THE MISPLACEMENT OF MINING SHAFTS AND ADITS IN VICTORIA. By S. Hunter. T. Au. I. M. E., vol. 10, p. 326. 14 pages. I.

DEVELOPMENT WORK IN MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 332. ½ column.

DEVELOPMENT OF MINES FOR DIFFERENT PITCH. M. & M., vol. 30, p. 588. 3½ columns. I.

- DEVELOPMENT OF A SLOPE MINE. M. & M., vol. 30, p. 340. Map.
- SIZE AND DEPTH OF SOME SHAFTS IN AMERICA. M. & M., vol. 29, p. 392. $\frac{1}{2}$ column.
- CIRCULAR VS. RECTANGULAR SHAFT SINKING. By H. M. Payne. E. & M. J., vol. 89, p. 231. 5 columns. I.
- ELLIPTICAL VS. RECTANGULAR SHAFTS. By W. A. Weldin. M. & M., vol. 31, p. 167. 5 columns. I.
- See also SHAFT SINKING.
- THE INTERVAL BETWEEN LEVELS. E. & M. J., vol. 85, p. 454. $\frac{1}{2}$ column.
- THE SYSTEMATIC DEVELOPMENT OF A COAL MINE. By W. Leckie. E. & M. J., vol. 85, p. 863. 11 columns. I.
- SYSTEMATIC DEVELOPMENT IN PITTSBURG SEAM. By F. Z. Schellenberg. E. & M. J., vol. 90, p. 521. 11 columns. I.
- ECONOMICAL DEVELOPMENT OF COAL MINES. By H. J. Nelms. E. & M. J., vol. 87, p. 800. $1\frac{1}{2}$ columns.
- PLAN OF DEVELOPMENT AT BOISSEVAIN, WEST VIRGINIA. E. & M. J., vol. 85, p. 866. 1 column. I.
- METHOD OF DEVELOPING THE MINE "C," WYOMING. E. & M. J., vol. 90, p. 226. Plan.
- METHODS OF DEVELOPMENT IN THE COAL FIELDS OF SOUTHERN COLORADO. M. & M., vol. 30, p. 588. $3\frac{1}{2}$ columns. I.
- DEVELOPMENT OF THE HOSMER COAL MINES. J. C. M. I., vol. 13, p. 242. 1 page. I.
- See also METHODS OF MINING COAL.
- METHOD OF DEVELOPMENT IN THE ITALY LIGNITE MINES. E. & M. J., vol. 89, p. 1176. $1\frac{1}{2}$ columns.
- DEVELOPMENT IN THE PITCHING COAL SEAMS OF HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 25. $\frac{1}{2}$ column. I.
- MINE DEVELOPMENT AT CANANEA, MEXICO. M. & M., vol. 30, p. 28. 2 columns.
- DEVELOPMENT OF THE MIAMI COPPER MINES. M. & M., vol. 30, p. 82. $\frac{1}{2}$ column. I.
- MINE DEVELOPMENT AT RAY, NEVADA. M. & M., vol. 29, p. 545. 1 column.
- DEVELOPMENT OF THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 123. 4 pages. I.
- MINING; DEVELOPMENT OF THE IRON ORE MINES OF THE BIRMINGHAM DISTRICT, ALABAMA. T. A. I. M. E., vol. 40, p. 113. 2 pages. I.
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- See also MINE SAMPLING and VALUE OF MINES.
- DEVELOPMENT AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 435. 6 columns. I.
- THE GIROUX SHAFT AT KIMBERLY, NEVADA. By C. E. Arnold. T. A. I. M. E., vol. 41, p. 536. $5\frac{1}{2}$ pages. I.
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- THE DEEP SHAFTS OF THE RAND. T. A. I. M. E., vol. 5, p. 44. $2\frac{1}{2}$ pages.
- See also DEEP MINING.
- DEVELOPMENT IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 86, 1 column, I.; p. 89, 9 columns, I.

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A MINING PUZZLE: Exploration at Broken Hill, New South Wales. By N. Dudley. T. A. I. M. E., vol. 2, p. 111. 3 pages.

See also MINE MAPS, and METHODS OF MINING, GENERAL AND MISCELLANEOUS.

See also COST OF DEVELOPMENT.

Shaft Sinking: Processes, Applications, Rate of Sinking, Raises, Winzes, Etc.

MODERN SHAFT SINKING. By F. Donaldson. M. & M., vol. 29, p. 392, $3\frac{1}{2}$ columns; p. 459, 10 columns, I.; p. 515, $7\frac{1}{2}$ columns, I.; p. 563, $6\frac{1}{2}$ columns, I.; vol. 30, p. 124, $9\frac{1}{2}$ columns, I.; p. 218, $5\frac{1}{2}$ columns, I.; p. 332, $5\frac{1}{2}$ columns, I.; p. 404, $5\frac{1}{2}$ columns, I.; p. 632, $5\frac{1}{2}$ columns, I.

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NOTES ON VERTICAL SHAFT SINKING ON THE WITWATERSRAND. By H. F. Roche. P. C. M. & M. Soc. S. A., vol. 5, p. 200, 8 columns, I.; p. 259, $7\frac{1}{2}$ columns; p. 312, $3\frac{1}{2}$ columns; vol. 6, p. 17, 3 columns.

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THE GIROUX SHAFT AT KIMBERLY, NEVADA. By C. E. Arnold. E. & M. J., vol. 89, p. 1325. 5 columns. I.

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THE SINKING AND EQUIPMENT OF THE LITTLETON COLLIERIES. By T. H. Bailey. T. I. M. E., vol. 39, p. 418. 38 pages. I.

SINKING INTO THE LOWER COAL-MEASURE AT HULTON COLLIERY. By A. J. Tonge. T. I. M. E., vol. 39, p. 350. $12\frac{1}{2}$ pages. I.

THE SINKING OF THE ASTLEY GREEN SHAFTS, AT ASTLEY, NEAR MANCHESTER, BY MEANS OF THE DROP-SHAFT METHOD AND UNDERHANGING TUBBING. By C. Pilkington and P. L. Wood. T. I. M. E., vol. 39, p. 529. 25 pages. I.

- SHAFT SINKING AT STELLA MINE, NEW YORK.** E. & M. J., vol. 88, p. 617. 2 columns. I.
- SINKING THE JOHN SHAFT AT HAMSTERLEY COLLIERY, THROUGH SAND AND GRAVEL, BY MEANS OF UNDERGROUND TUBBING.** By J. Cummins. T. I. M. E., vol. 38, p. 320. 13 pages. I.
- SINKING THE CLONAN SHAFT AT MINEVILLE, NEW YORK.** By G. C. Stoltz. E. & M. J., vol. 85, p. 111. 4 columns. I.
- SINKING A FIVE-COMPARTMENT SHAFT ON THE RAND.** By E. M. Weston. E. & M. J., vol. 85, p. 391. 15 columns. I.
- SINKING OPERATIONS AT WELLESLEY NEW FITTING, WEMYSS COLLIERIES.** By G. D. Budge and P. Dunsire. T. I. M. E., vol. 36, p. 318. 6½ pages. I.
- SINKING AND TIMBERING OF THE ALLAN SHAFTS, NEAR STELLARTON, NOVA SCOTIA.** By H. E. Coll. J. M. Soc. N. S., vol. 12, p. 12. 12 pages. I.
- SHAFT SINKING AT QUINCY MINE, MICHIGAN.** J. C. M. I., vol. 10, p. 401. 1 page. I.
- SINKING THROUGH BAD GROUND.** By F. W. Adgate. Min. & Sci. Press, vol. 95, p. 183. 4½ columns. I.
- SHAFT SINKING IN SOFT GROUND BY FORE-POLING.** M. & M., vol. 29, p. 515. 2 columns. I.
- SHAFT SINKING THROUGH FAULTED GROUND.** E. & M. J., vol. 87, p. 215. 1½ columns.
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- SINKING A WET SHAFT AT TOMBSTONE.** By E. W. Walker. Min. & Sci. Press, vol. 98, p. 284. 3 columns. I.
- SINKING THROUGH SAND AT NEW-BIGGIN COLLIERY.** By E. M. Bainbridge and W. M. Redfeam. T. I. M. E., vol. 38, p. 577. 16 pages. I.
- SHAFT SINKING IN QUICKSAND AND BOULDERS.** By G. W. Stuart. J. M. Soc. N. S., vol. 11, p. 69. 5½ pages.
- SHAFT SINKING BY CEMENTATION.** By L. Morin. E. & M. J., vol. 86, p. 221. 6 columns. I.
- See also **SHAFT LINING.**
- PUDDLING A WET SHAFT.** By H. Bourisin. Min. & Sci. Press, vol. 96, p. 127. 2½ columns. I.
- SINKING A SHAFT WITH DROP-SHAFT AND AIR-LOCK.** Sch. Mines Quart., vol. 31, p. 219. 5 pages. I.
- THE DROP-SHAFT METHOD OF SINKING.** E. & M. J., vol. 90, p. 918. 4½ columns. I.
- SHAFT SINKING BY CAISSONS OR DROP-SHAFTS.** M. & M., vol. 29, p. 517. 3½ columns. I.
- SPECIAL METHODS OF SHAFT SINKING.** P. C. M. & M. Soc. S. A., vol. 8, p. 64. 2½ columns.
- DRIVING A LONG VERTICAL RAISE.** By C. T. Kriebel. M. & M., vol. 30, p. 282. 2 columns. I.
- SINKING A WINZE WITH LONG HOLES.** By G. C. McFarlane. E. & M. J., vol. 86, p. 713. 1½ columns. I.
- LONG-HOLE SYSTEM OF SHAFT SINKING.** E. & M. J., vol. 85, p. 659. ½ column.
- See also **USE OF BORE HOLES, DIAMOND AND ROTARY DRILLS, and CHURN DRILLS.**
- THE USE OF THE CHANNELING MACHINE IN MINING OPERATIONS: A Proposed Method.** Min. & Sci. Press, vol. 101, p. 707. 5 columns. I.
- DRIVING VERTICAL RAISES WITH STOPPING DRILLS.** By A. O. Christensen. E. & M. J., vol. 88, p. 937. 2½ columns. I.
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- DRIVING A SLOPE IN NEWFOUNDLAND.** M. & M., vol. 31, p. 569. 7 columns. I.
- BORING LARGE SHAFTS.** Min. & Sci. Press, vol. 20, p. 257, 2 columns, I.; p. 272, 1½ columns, I.
- THE KIND-CHAUDRON BORING PROCESS FOR SHAFT SINKING.** M. & M., vol. 30, p. 332. 5½ columns. I.
- SINKING BY MEANS OF UNDERHANGING TUBBING.** E. & M. J., vol. 89, p. 878. 4½ columns. I.
- See also **SHAFT LINING.**
- SHAFT SINKING BY FREEZING PROCESS.** By S. F. Walker. M. & M., vol. 30, p. 41. 7½ columns.
- EXTENSION OF A COLLIERY WORKING SHAFT.** By M. S. Hachita. E. & M. J., vol. 90, p. 1168. 6½ columns. I.
- DRILLING IN SHAFT SINKING ON THE RAND.** E. & M. J., vol. 85, p. 393. 1 column.
- See also **DRILLING AND BORING.**
- THE SINKING OF CIRCULAR SHAFTS.** By Robert Steven. T. I. M. E., vol. 38, p. 22. 6 pages. I.
- See also **DEVELOPMENT: Size, Shape, etc., of Shafts.**
- NOTE ON A PROBLEM DURING SHAFT SINKING.** By C. B. Saner. P. C. M. & M. Soc. S. A., vol. 9, p. 70, 8 columns, I.; p. 303, 4½ columns, I.
- RATE OF SHAFT SINKING ON THE RAND.** T. Au. I. M. E., vol. 5, p. 49. 6 pages.
- RAPID SHAFT SINKING IN BUTTE.** By C. J. Stone. E. & M. J., vol. 90, p. 107. 2 columns.
- RECORD OF SHAFT SINKING AT NO. 1 SKY LINE MINE.** Min. & Sci. Press, vol. 88, p. 40. Table.
- NEW SHAFT SINKING RECORD AT CORBIN, MONTANA.** By F. J. Tuck. Min. & Sci. Press, vol. 101, p. 406. 1½ columns.
- RECORD SHAFT SINKING, SOUTH AFRICA.** Min. & Sci. Press, vol. 95, p. 438. ½ column.
- SKIPS OR BUCKETS IN SINKING VERTICAL SHAFTS.** By C. B. Saner. E. & M. J., vol. 87, p. 644. 7 columns.
- See also **HOISTING BUCKETS, and SKIPS FOR RAISING MINERAL.**
- VERTICAL CURVES IN SHAFTS.** By S. Smillie. E. & M. J., vol. 90, p. 1000. 5 columns. I.
- SPECIFICATIONS FOR SINKING AND LINING SHAFTS.** M. & M., vol. 29, p. 463. 1½ columns.
- ARRANGEMENT OF HOLES IN SHAFT SINKING IN BENDIGO.** T. Au. I. M. E., vol. 8, pt. 2, p. 197. 5 pages. I.
- ARRANGEMENT OF HOLES IN SHAFT SINKING ON THE RAND.** E. & M. J., vol. 85, p. 395. Tables. I.
- ARRANGEMENT OF HOLES IN SHAFT SINKING, ALLAN SHAFTS, NOVA SCOTIA.** J. M. Soc. N. S., vol. 12, p. 22. I.
- See also **ARRANGEMENT OF HOLES IN BLASTING.**
- See also **USE OF CONCRETE IN MINES.**
- See also **DRAINAGE IN GENERAL and PUMPS FOR MINE USE.**
- See also **ROPES, CHAINS, COUPLINGS, etc., and DEVELOPMENT.**

Methods of Mining Coal, Lignite, Etc.

- THE MINING OF COAL: Pits and Galleries in General.** Min. Mag., vol. 8, p. 163, 2 pages; vol. 7, p. 73, 4 pages; p. 258, 7½ pages; p. 463, 7½ pages.
- THE VARIOUS MODES IN WHICH COAL IS WORKED IN ENGLAND, AND AN EXAMINATION OF THE PRACTICE IN DIFFERENT DISTRICTS.** By J. K. Blackwell. Min. Mag., vol. 1, p. 559, 12 pages; p. 3, 10 pages.
- GENERAL REMARKS AND RULES ON THE WORKING AND WINNING OF COAL.** Min. Mag., vol. 4, p. 135, 7 pages; p. 337, 6 pages.

- SOME REMARKS ON COAL MINING.** By J. Marlor. *Min. Mag.*, vol. 5, p. 415, 4 pages; p. 458, 10½ pages; vol. 6, p. 27, 13½ pages; p. 107, 10 pages; p. 213, 12½ pages; p. 323, 10 pages.
- COAL MINING IN ALABAMA.** By H. M. Payne. *E. & M. J.*, vol. 89, p. 1163. 1½ columns.
- COAL AND COAL MINING IN NEW SOUTH WALES.** By T. Parton. *T. Au. I. M. E.*, vol. 10, p. 233. 27½ pages.
- MINING METHODS AT SEATON-DELAVAL COLLIERY, ENGLAND.** By L. W. Mayer. *E. & M. J.*, vol. 86, p. 765. 13 columns. I.
- COAL MINING IN NORTHUMBERLAND, ENGLAND.** By G. R. Dixon. *E. & M. J.*, vol. 85, p. 212. 8 columns. I.
- METHODS OF WORKING IN THE NORTH-UMBERLAND COAL MINES.** *E. & M. J.*, vol. 85, p. 212. 3 columns.
- COAL MINING BY THE BORD-AND-PILLAR SYSTEM, NORTHUMBERLAND, ENGLAND.** By G. R. Dixon. *E. & M. J.*, vol. 85, p. 411. 12½ columns. I.
- See also ROOM AND PILLAR MINING.
- SPECIAL METHOD FOR MINING COAL IN ENGLAND.** By G. R. Dixon. *E. & M. J.*, vol. 85, p. 1203. 7 columns. I.
- SOUTH STAFFORDSHIRE METHOD OF MINING COAL.** By L. W. Mayer. *E. & M. J.*, vol. 86, p. 673. 10 columns. I.
- OPERATION OF CARMAUX COAL MINES IN FRANCE.** By L. W. Mayer. *E. & M. J.*, vol. 86, p. 574. 16 columns. I.
- ADVANCED METHODS OF MINING COAL IN SILESIA.** By L. W. Mayer. *E. & M. J.*, vol. 86, p. 887. 17 columns. I.
- THE TWO-ENTRY METHOD OF MINING IN SOUTHERN INDIANA.** *E. & M. J.*, vol. 90, p. 870. 4 columns. I.
- See also DEVELOPMENT, ETC.
- COAL MINING METHODS IN RANDOLPH COUNTY, MISSOURI.** By J. J. Rutledge. *E. & M. J.*, vol. 86, p. 6. 6½ columns. I.
- METHODS OF MINING COAL IN NEW ZEALAND.** By S. Fry. *E. & M. J.*, vol. 87, p. 753. 9½ columns. I.
- MINING METHODS IN THE PITTSBURG SEAM.** *E. & M. J.*, vol. 90, p. 521. 10 columns. I.
- SUGGESTED MINING METHOD FOR PITTSBURG SEAM.** By R. Y. Williams. *E. & M. J.*, vol. 86, p. 330. 7½ columns. I.
- POCAHONTAS REGION MINING METHODS.** By H. H. Stoek. *M. & M.*, vol. 29, p. 394. 13 columns. I.
- METHODS OF MINING IN THE POCAHONTAS REGION.** *M. & M.*, vol. 29, p. 398. 4 columns. I.
- COAL MINING METHODS IN SIBERIA.** *E. & M. J.*, vol. 89, p. 625. 3½ columns.
- COAL MINING AT DANTE, VIRGINIA.** By R. W. Stone. *U. S. G. S.*, Bull. 316, p. 68. 8 pages. I. 1906.
- METHOD OF MINING COAL IN WASHINGTON.** *M. & M.*, vol. 30, p. 17. ½ column. I.
- METHODS OF MINING COAL IN WEST VIRGINIA.** *M. & M.*, vol. 29, p. 509. 11½ columns. I.
- COAL MINING AT MORGANTOWN, WEST VIRGINIA.** By R. B. Brinsmade. *E. & M. J.*, vol. 89, p. 1236. 5 columns.
- COAL MINING METHODS AT GARY, WEST VIRGINIA.** By J. S. Walker. *E. & M. J.*, vol. 88, p. 6. 10½ columns. I.
- SYSTEMS OF MINING IN THE DIAMONDVILLE COAL FIELD, WYOMING.** *E. & M. J.*, vol. 85, p. 116. 1½ columns.
- METHOD OF WORKING THE GEORGE'S CREEK "BIG VEIN": Old and New.** *E. & M. J.*, vol. 87, p. 307. 6 columns. I.
- PLANS FOR MINING A FLAT COAL SEAM.** By A. H. Stow. *E. & M. J.*, vol. 85, p. 504. 9½ columns. I.

- MINING IN FLAT COAL SEAMS UNDER HEAVY COVER.** By A. H. Stow. E. & M. J., vol. 86, p. 135. 11½ columns. I.
- METHOD OF MINING TWO SEAMS OF COAL WITH AN INTERVENING PARTING OF SHALE 6 TO 10 FEET THICK.** M. & M., vol. 29, p. 46. 1 column. I.
- GETTING TOP (ROOSTER) COAL.** E. & M. J., vol. 86, p. 15. ¼ column.
- THE BLOCK SYSTEM OF COAL MINING IN ENGLAND.** E. & M. J., vol. 85, p. 1203. 2½ columns. I.
- WORKING A COAL SEAM OF MODERATE THICKNESS.** By G. R. Dixon. E. & M. J., vol. 85, p. 1247. 6½ columns. I.
- WORKING TWO COAL SEAMS IN CLOSE PROXIMITY.** By W. F. White. E. & M. J., vol. 87, p. 756. 2½ columns. I.
- A METHOD OF WORKING A THICK COAL SEAM.** By G. Poole. E. & M. J., vol. 86, p. 15. 5½ columns. I.
- NOTES ON WORKING THE THICK COAL OF SOUTH STAFFORDSHIRE AND WARWICKSHIRE.** By L. Holland. T. I. M. E., vol. 37, p. 46. 6½ pages. I.
- HORIZONTAL-SLICE METHOD OF MINING THICK COAL SEAMS, ST. ÉTIENNE.** T. I. M. E., vol. 36, p. 408. 12 pages. I.
- MINING A 20-FOOT SEAM AT CARMAUX, FRANCE.** E. & M. J., vol. 86, p. 578. 2 columns.
- See also **MINING THICK AND MASSIVE DEPOSITS.**
- METHOD OF WORKING A STEEP COAL SEAM.** By A. Y. Hay. E. & M. J., vol. 89, p. 1331. 8 columns. I.
- WORKING A STEEP COAL SEAM.** By A. Y. Hay. M. & M., vol. 31, p. 77. 4½ columns. I.
- COAL MINING IN A VERTICAL SEAM.** By H. M. Payne. E. & M. J., vol. 90, p. 469. 1½ columns. I.
- THE WORKING OF THE INCLINED SEAMS IN THE ST. ÉTIENNE COAL FIELD, AT THE MONTRAM-BERT AND LA BÉRANDIÈRE COLLIÈRIES.** By H. C. Annett. T. I. M. E., vol. 36, p. 394. 30½ pages. I.
- THE CHUTE-BREAST SYSTEM OF MINING IN WASHINGTON.** M. & M., vol. 30, p. 313. ¼ column. I.
- PITCH MINING IN THE HAZLETON DISTRICT.** By D. S. Wolfe. Coal Mining Supplement, E. & M. J., vol. 88, p. 25. 5½ columns. I.
- METHODS OF MINING LIGNITE IN ITALY.** By C. R. King. E. & M. J., vol. 89, p. 1176. 17½ columns. I.
- METHOD OF MINING GILSONITE: Use of a Steam Jet.** E. & M. J., vol. 89, p. 1115. ¾ column. I.
- See also **MINE MAPS.**
- See also **ROOM-AND-PILLAR MINING, and LONGWALL MINING.**
- Room-and-Pillar Mining**
- A ROOM-AND-PILLAR METHOD.** By A. E. Robinson. M. & M., vol. 31, p. 88. ¼ column. I.
- ROOM-AND-PILLAR MINING IN THE GREAT FALLS COAL FIELD, MONTANA.** E. & M. J., vol. 87, p. 588. ¾ column. I.
- COAL MINING ON THE RETREATING SYSTEM.** By H. J. Nelms. E. & M. J., vol. 86, p. 1251. 2½ columns. I.
- COAL MINING BY THE RETREATING ROOM-AND-PILLAR SYSTEM.** By H. J. Nelms. E. & M. J., vol. 86, p. 17. 4 columns. I.
- ROOM-AND-PILLAR METHOD OF WORKING COAL, GARY, WEST VIRGINIA.** E. & M. J., vol. 88, p. 9. Map.
- ADVANCE AND RETREAT ROOM-AND-PILLAR SYSTEM.** By H. J. Nelms. E. & M. J., vol. 89, p. 879. 2½ columns. I.
- METHODS OF MINING ROOM COAL IN WEST VIRGINIA.** M. & M., vol. 29, p. 511. ¼ column. I.
- METHOD OF WORKING THE HOSMER COAL MINES: Room-and-Pillar.** J. C. M. I., vol. 13, p. 243. I.

COAL MINING AT KATONAH, PENNSYLVANIA. By E. K. Judd. E. & M. J., vol. 55, p. 453. 1½ columns. I.

LIGNITE COAL MINING IN BOHEMIA: ROOM-AND-PILLAR METHOD. By W. S. Hall. M. & M., vol. 29, p. 253. 4½ columns. I.

MINING OF BORAX IN AMERICA: ROOM-AND-PILLAR METHOD. E. & M. J., vol. 85, p. 827. 1 column.

MICA MINING. By A. S. Atkinson. E. & M. J., vol. 57, p. 941. 3½ columns.

See also **METHODS OF MINING COAL**, and first volume of **INDEX**.

Longwall Mining

ON THE WORKING OF THIN SEAMS OF COAL, WITH OBSERVATIONS ON LONGWALL AND BORD-AND-PILLAR WORK. By C. C. Greenwell. Min. Mag., vol. 9, p. 413, 6 pages; p. 494, 12½ pages.

LONGWALL IN INCLINED SEAMS. By J. G. MacKenzie. M. & M., vol. 29, p. 491. 3½ columns. I.

INFLUENCE OF CLEAT IN LONGWALL MINING. E. & M. J., vol. 85, p. 213. 1½ columns.

See also **GEOLOGIC PROGRESS AND STUDIES**.

PANEL LONGWALL MINING. E. & M. J., vol. 85, p. 894. 1½ columns.

See also **PANEL MINING**.

AMERICAN LONGWALL MINING METHODS. By H. M. Payne. E. & M. J., vol. 90, p. 1020. 8 columns. Maps.

LONGWALL METHODS OF MINING A COAL SEAM. By L. W. Mayer. E. & M. J., vol. 80, p. 19. 13 columns. I.

LONGWALL ADVANCING IN ANTHRACITE MINING IN PENNSYLVANIA. M. & M., vol. 20, p. 40. 1 column. I.

THE LONGWALL MINES OF ILLINOIS. By W. F. Pelletier. E. & M. J., vol. 80, p. 380. 5 columns. I.

THE LONGWALL METHOD OF WORKING IN ENGLAND. By Geo. R. Diner. E. & M. J., vol. 85, p. 1145. 11½ columns. I.

LONGWALL ADVANCING IN THE ST. ETIENNE COAL MINES. T. I. M. E., vol. 36, p. 496. 2 pages. I.

LONGWALL MINING IN CARMUX, FRANCE. E. & M. J., vol. 86, p. 576. 4 columns. I.

LONGWALL MINING AT SEATON-DRELAVAL COLLIERY, ENGLAND. E. & M. J., vol. 86, p. 765. 8 columns. I.

LONGWALL METHOD IN ENGLAND. E. & M. J., vol. 86, p. 964. 3 columns. I.

LONGWALL MINING IN THE KANSAS STATE MINE. E. & M. J., vol. 80, p. 1159. 9 columns. I. Map.

THE LONGWALL METHOD OF MINING EMPLOYED IN THE FROZEN GRAVELS OF THE NORTH. Min. & Sci. Press, vol. 98, p. 382. 8 columns. I.

See also **MINING FROZEN GRAVELS**, **METHODS OF MINING COAL** and **COST OF COAL MINING**.

Panel Mining

MINING COAL WITH THE PANEL SYSTEM. By A. H. Stow. E. & M. J., vol. 85, p. 892. 10½ columns. I.

See also **LONGWALL MINING**, first volume of **INDEX**, and **COST OF COAL MINING**.

Drawing Pillars in Coal Mines

PILLAR DRAWING. By J. Jenkins. M. & M., vol. 30, p. 151. 4 columns. I.

DRAWING PILLARS IN COAL MINING. M. & M., vol. 31, p. 415. ½ column. I.

METHODS OF REMOVING COAL PILLARS. By F. W. Cunningham. M. & M., vol. 31, p. 495. 8 columns. I.

DRAWING OF PILLARS IN THE PITTSBURG SEAM. E. & M. J., vol. 90, p. 521. 10 columns. I.

METHOD OF ROBBING PILLARS IN THE POCAHONTAS REGION. M. & M., vol. 29, p. 399. 1 column. I.

PILLAR DRAWING IN THE CONNELLSVILLE REGION. T. A. I. M. E., vol. 41, p. 229. 10 pages. I.

ROBBING PILLARS IN THE PITCHING COAL SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 27. $\frac{1}{2}$ column.

RECOVERING ABANDONED COAL PILLARS. By W. L. Hamilton. E. & M. J., vol. 88, p. 22. 6 columns. I.

WORKING THE WALLS OR DRAWING PILLARS IN COAL MINING BY LONGWALL. M. & M., vol. 29, p. 492. 1 column.

ROBBING PILLARS AT THE SEATON-DELAVAL COLLIERY, ENGLAND. E. & M. J., vol. 86, p. 768. 1 column. I.

ROBBING PILLARS IN THE NORTHUMBERLAND MINES, ENGLAND. E. & M. J., vol. 85, p. 411. 1 column.

ROBBING PILLARS IN ENGLISH COAL MINING. E. & M. J., vol. 85, p. 1247. 2 columns. I.

RECOVERING ORE FROM PILLARS. E. & M. J., vol. 89, p. 699. $\frac{1}{2}$ column.

See also **CONSERVATION, METHODS OF MINING COAL and COST OF COAL MINING.**

Breaking Down Coal at the Face

METHODS OF UNDERCUTTING COAL. E. & M. J., vol. 89, p. 622. 2 $\frac{1}{2}$ columns.

METHOD OF UNDERCUTTING IN THE WIND ROCK COAL MINE, TENNESSEE. M. & M., vol. 31, p. 66. 1 column.

WORKING THE BREASTS IN THE PITCHING SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 27. $\frac{1}{2}$ column. I.

BREAKING DOWN COAL AT THE FACE IN WEST VIRGINIA: At Thomas. M. & M., vol. 30, p. 204. I.

METHOD OF WORKING ROOMS IN COALTON MINE, WEST VIRGINIA. M. & M., vol. 30, p. 190. $\frac{1}{2}$ column. I.

WORKING AT THE FACE IN THE LIGNITE MINES OF ITALY. E. & M. J., vol. 89, p. 1177. 2 columns. I.

See also **MINING MACHINES AT THE FACE, ELECTRIC COAL MINING MACHINES, MECHANICAL MINING APPLIANCES and COST OF COAL MINING.**

Rooms and Entries: Dimensions, Etc.

See first volume of **INDEX, and COST OF TUNNELING.**

Methods of Mining: General and Miscellaneous

MINING METHODS AND COSTS AT THE ESPERANZA MINE, MEXICO. By W. E. Hindry. Min. & Sci. Press, vol. 99, p. 846. 6 columns. I.

METHOD OF MINING BARITE IN MISSOURI. T. A. I. M. E., vol. 40, p. 728. 6 $\frac{1}{2}$ pages. I.

CLAY MINING AND ITS RELATION TO COAL MINING. By R. R. Hice. E. & M. J., vol. 88, p. 105. 7 $\frac{1}{2}$ columns.

METHODS OF MINING AND HANDLING ORE IN BUTTE. By E. Higgins. E. & M. J., vol. 85, p. 97. 8 columns. I.

See also **METHODS OF HANDLING MINERAL AND COAL.**

MINING METHODS EMPLOYED AT CANANEA, MEXICO. By M. J. Elsing. E. & M. J., vol. 90, p. 914, 9 $\frac{1}{2}$ columns, I.; p. 963, 10 $\frac{1}{2}$ columns, I.

MINING METHODS IN THE CLIFTON-MORENCI DISTRICT, ARIZONA. Min. & Sci. Press, vol. 101, p. 831. 12 columns. I.

MICHIGAN COPPER MINING METHODS. By L. Fraser. Min. & Sci. Press, vol. 96, p. 847. 6 $\frac{1}{2}$ columns. I.

WORK AND METHODS AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.

- By L. G. Hancock. T. Au. I. M. E., vol. 11, p. 97. 7 pages.
- UNDERGROUND MINING METHODS AT THE QUINCY COPPER MINE, MICHIGAN. By G. R. McLaren. J. C. M. I., vol. 10, p. 399. 18½ pages. I.
- METHODS OF MINING IRON ORE AT SUNRISE, WYOMING. By B. W. Vallat. E. & M. J., vol. 85, p. 399. 9½ columns. I.
- MINING ON THE GOGEBIC RANGE. By P. S. Williams. M. & M., vol. 31, p. 712. 4½ columns. I.
- METHOD OF MINING AT THE NORTH STAR MINES, GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 397. 2 columns. I.
- COAL MINING METHODS IN GOLD MINES. E. & M. J., vol. 90, p. 1043. 1½ columns.
- See also METHODS OF MINING COAL.
- THE MEXICAN METHOD OF MINING. E. & M. J., vol. 86, p. 311. 1½ columns.
- NEW MINING AND MILLING PRACTICE ON THE RAND. By E. M. Weston. E. & M. J., vol. 86, p. 323. 5 columns.
- MINING AT THE REDJANG-LEBONG GOLD-SILVER MINE, SUMATRA. By H. Philp. P. C. M. & M. Soc. S. A., vol. 10, p. 315. 6½ columns.
- THE PILGRIMS REST GOLD FIELDS AND MINING METHODS. By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 16. 3½ columns.
- MINING PRACTICE AT KALGOORLIE, WEST AUSTRALIA. By G. W. Williams. E. & M. J., vol. 85, p. 193. 8½ columns. I.
- METHOD OF MINING AT THE HELEN MINE, MICHIGAN, ONTARIO. J. C. M. I., vol. 13, p. 123. 4 pages. I.
- NOTES ON PRACTICAL MINING IN BENDIGO. By L. A. Samuels. T. Au. I. M. E., vol. 8, pt. 2, p. 192. 12 pages. I.
- SOME NOTES ON THE MINING PRACTICE OF THE WITWATERSRAND GOLD FIELDS, SOUTH AFRICAN REPUBLIC. By G. A. Denny. T. Au. I. M. E., vol. 5, p. 8. 62 pages. I.
- MINING METHODS AT KALGOORLIE, WEST AUSTRALIA MINES. E. & M. J., vol. 85, p. 196. 1 column.
- MINING AT THE PROMONTORIO SILVER MINE, DURANGO, MEXICO. T. A. I. M. E., vol. 38, p. 747. 2 pages.
- METHODS OF DEEP LEAD MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 377. 2½ columns.
- METHOD OF MINING THE DEEP LEAD IN AUSTRALIA. By D. H. Browde. Min. & Sci. Press, vol. 97, p. 568. 2 columns.
- See also AUSTRALIA, OCCURRENCE OF GOLD, and AURIFEROUS GRAVELS.
- PRACTICAL HINTS ON DEEP ALLUVIAL MINING. By D. H. Browde. T. Au. I. M. E., vol. 7, p. 61. 10 pages.
- THE STULL-SET METHOD OF MINING AT THE HECLA MINE, IDAHO. E. & M. J., vol. 89, p. 312. 1 column.
- SQUARE-SET MINING, MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 749. 1 column. I.
- SQUARE-SET SYSTEM IN THE NEW SOUTH WALES MINES. T. Au. I. M. E., vol. 9, p. 119. 4½ pages. I.
- See also SQUARE-SET TIMBERING.
- MINING AND STOPING METHODS IN THE COEUR D'ALENE. By J. Tyssowski. E. & M. J., vol. 90, p. 452. 8½ columns. I.
- MINING METHOD IN THE COEUR D'ALENE REGION. Min. & Sci. Press, vol. 96, p. 622. 4 columns. I.
- GRANBY MINING METHODS. By C. M. Campbell. J. C. M. I., vol. 11, p. 392. 12 pages. I.
- METHODS OF MINING IN THE GRANBY ORE BODIES. By C. M. Campbell. E. & M. J., vol. 87, p. 252. 13½ columns. I.

DEPARTURE IN SHEET-ORE MINING IN THE JOPLIN DISTRICT. By T. Chapman. E. & M. J., vol. 87, p. 942. 1 column. I.

METHOD OF MINING EMPLOYED IN THE LEAD MINES OF MECHERNICH, PRUSSIA. E. & M. J., vol. 86, p. 169. 9½ columns. I.

METHODS OF WORKING THE NITER DEPOSITS OF CHILE. E. & M. J., vol. 80, p. 20. 3 columns. I.

THE WORKING OF OIL-SHALE AT PUMPHERSTON, SCOTLAND. By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.

MINING METHODS IN THE NORTH. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 810, 8 columns, I.; vol. 98, p. 86, 8 columns, I.; p. 382, 8 columns, I.; p. 587, 10 columns, I.

DRY-WALL MINING AT PANAGUN, BRAZIL. Min. Mag., London, vol. 3, p. 379. 1½ columns. I.

A REVOLUTION IN MINING METHODS. By G. E. Walcott. Min. & Sci. Press, vol. 101, p. 707. 6 columns. I.

A METHOD OF MINING IN HEAVY GROUND. By W. L. Fleming. E. & M. J., vol. 88, p. 375. 3½ columns. I.

THE PANEL SYSTEM AS APPLIED TO METAL MINING. By H. E. West. E. & M. J., vol. 87, p. 1177. 8 columns. I.

See also **ROOM AND PILLAR MINING, and METHODS OF COAL MINING.**

RALEIGH COUNTY MINING METHODS, WEST VIRGINIA. By H. H. Stoek. M. & M., vol. 29, p. 471. 10 columns. I.

See also **MINE MAPS, METHODS OF STOPPING IN MINES, and COSTS OF MINING.**

Mining Thick and Massive Deposits

THE MILLING METHOD OF MINING AS EMPLOYED AT THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 123. 4 pages. I.

MINING THE TREADWELL LODE. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 85. 7½ columns. I.

See also **METHODS OF STOPPING.**

METHODS OF MINING EMPLOYED AT THE CREIGHTON MINE, SUDBURY, CANADA. J. C. M. I., vol. 11, p. 574. 6 pages. I.

See also **PACKING MINE WORKINGS, ETC.**

METHOD OF MINING AT THE DE BEERS DIAMOND MINES. P. C. M. & M. Soc. S. A., vol. 7, p. 228. ½ column.

See also **MINING THICK AND MASSIVE DEPOSITS, and METHODS OF STOPPING.**

See also **SALT MAKING, and first volume of INDEX.**

The Caving Systems of Mining

THE DOME OF EQUILIBRIUM AND THE CAVING SYSTEM OF MINING. By C. T. Rice. Min. & Sci. Press, vol. 95, p. 85. 2½ columns.

THE CAVING SYSTEM AT THE DARIEN MINE, PANAMA. By A. B. Chase. Min. & Sci. Press, vol. 95, p. 238. 1½ columns. I.

THE CAVING METHOD AS EMPLOYED AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1273. 13 columns. I.

CANANEA CAVING AND SLICING SYSTEMS. By R. L. Herrick. M. & M., vol. 30, p. 23. 13½ columns. I.

TOP-SLICING MINING METHODS AT CANANEA, MEXICO. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 230. 2½ columns. I.

THE TOP-SLICE SYSTEM AT CANANEA. M. & M., vol. 30, p. 23. 13 columns. I.

THE SLICING SYSTEM AT CANANEA, MEXICO: A Caving Method. E. & M. J., vol. 90, p. 915. 1½ columns. I.

THE CAVING SYSTEM AT CANANEA: Caving Pillars. E. & M. J., vol. 90, p. 963. 4 columns. I.

- CAVING METHODS IN THE ARIZONA COPPER MINES: Top-Slice and Sub-Drift Methods.** Min. & Sci. Press, vol. 99, p. 392. 1½ columns. I.
- THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA.** By M. J. Elsing. E. & M. J., vol. 90, p. 174. 6 columns. I.
- THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA.** E. & M. J., vol. 90, p. 1291. 2½ columns.
- THE TOP-SLICE SYSTEM AT METCALF, ARIZONA.** E. & M. J., vol. 90, p. 120. ½ column. I.
- BLOCK-CAVING AT THE CLIFTON-MORENCI MINES.** Min. & Sci. Press, vol. 101, p. 835. 1 column. I.
- THE CAVING SYSTEM OF MINING EMPLOYED AT MIAMI, ARIZONA.** M. & M., vol. 30, p. 755. 4 columns. I.
- THE CAVING METHOD EMPLOYED AT MIAMI, ARIZONA.** M. & M., vol. 30, p. 83. 1 column. I.
- METHOD OF MINING AT MIAMI, ARIZONA: Top-Slice and Sub-Drift Caving Systems.** Min. & Sci. Press, vol. 99, p. 657. 3 columns. I.
- THE CAVING METHOD AS EMPLOYED IN THE GLOBE-KELVIN DISTRICT, ARIZONA.** E. & M. J., vol. 89, p. 813. 2 columns. I.
- CAVING AT BINGHAM CANYON, UTAH.** Min. & Sci. Press, vol. 98, p. 520, 3 columns, I.; p. 555, 3 columns, I.
- THE CAVING SYSTEM OF MINING AT ELY, NEVADA.** M. & M., vol. 29, p. 25, ½ column; p. 83, ½ column.
- IRON MINING IN MINNESOTA.** By E. K. Soper. Min. & Sci. Press, vol. 101, p. 767. 5½ columns. I.
- MARQUETTE RANGE CAVING METHOD.** By H. H. Stock. M. & M., vol. 30, p. 193. 14½ columns. I.
- NOTES ON CAVING SYSTEM IN NORTHERN IRON MINES: Sub-drift Method.** By A. H. Fay. E. & M. J., vol. 88, p. 961. 9 columns. I.
- CHANGE OF METHOD IN MINING SOFT ORE.** By S. R. Elliott. Min. & Sci. Press, vol. 99, p. 97. 4 columns. I.
- THE TOP-SLICE METHOD IN THE GOGEBIC RANGE.** M. & M., vol. 31, p. 712. 4½ columns. I.
- UNDERGROUND METHODS OF MINING USED ON THE GOGEBIC RANGE.** By P. S. Williams. T. L. S. M. I., vol. 15, p. 179. 16 pages. I.
- See also **METHODS OF MINING: GENERAL AND MISCELLANEOUS, and MINING THICK AND MASSIVE DEPOSITS, also COST OF METAL MINING.**

Pocket Mining

- O'HARA POCKET MINE, TUOLUMNE COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 96, p. 782. 1½ columns.
- See also first volume of INDEX.

Drift Mining

- See first volume of INDEX, and COST OF METAL MINING.

Methods of Stoping in Mines

- NOTES ON DIFFERENT METHODS OF STOPING.** P. C. M. & M. Soc. S. A., vol. 10, p. 301. 1½ columns.
- STOPING IN HEAVY GROUND.** E. & M. J., vol. 88, p. 375. ½ column. I.
- STOPING IN THE SLICING SYSTEM.** E. & M. J., vol. 89, p. 1053. ½ column.
- See also **THE CAVING SYSTEM OF MINING.**
- PORTABLE SCAFFOLD FOR MINE USE.** E. & M. J., vol. 89, p. 404. 1 column. I.
- METHOD OF WORKING VERTICAL SEAMS OF OIL-SHALE, SCOTLAND.** T. I. M. E., vol. 36, p. 587. 2 pages. I.
- DRILLING AND BLASTING IN STOPING ON THE RAND.** P. C. M. & M. Soc. S. A., vol. 9, p. 14. 1 column.
- See also **BLASTING IN METAL MINES, and USE OF EXPLOSIVES IN MINING.**

STOPING AT THE QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 405
1½ pages. I.

STOPING METHODS IN MINES OF DUCKTOWN BASIN: Underhand Work. By J. Tyssowski. E. & M. J., vol. 89, p. 463. 5 columns. I.

STOPING IN THE SUPERIOR AND BOSTON MINE, ARIZONA. M. & M., vol. 31, p. 112. 4 columns.

METHODS OF STOPING AT THE CLIFTON-MORENCI MINES. Min. & Sci. Press, vol. 101, p. 831. 3 columns.

STOPING WITHOUT TIMBERS AT METCALF, ARIZONA. E. & M. J., vol. 90, p. 119. 2 columns. I.

STOPING AT HOMESTAKE MINE, SOUTH DAKOTA. By J. Tyssowski. E. & M. J., vol. 90, p. 74. 7½ columns. I.

METHOD OF STOPING IN THE TREADWELL MINES. Min. & Sci. Press, vol. 97, p. 89. 2½ columns. I.

See also **MINING THICK AND MASSIVE DEPOSITS.**

STOPING AT THE LOS PILARES MINE, MEXICO. M. & M., vol. 31, p. 108. 3 columns. I.

METHODS OF STOPING AT THE NORTH STAR MINES, GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 398. ½ column. I.

NOTES ON DIFFERENT METHODS OF STOPING IN USE ON THE KALGOORLIE FIELD. By J. Cheffirs. T. Au. I. M. E., vol. 13, p. 211. 3 pages.

STOPING METHODS AT KALGOORLIE. By J. Cheffirs. Min. & Sci. Press, vol. 100, p. 391. 1½ columns.

METHODS OF STOPING IN USE IN THE KALGOORLIE FIELD. By J. Cheffirs. E. & M. J., vol. 89, p. 357. 2½ columns.

STOPING IN THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 750. 1½ columns.

STOPING IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 6, p. 124. 12 columns. I.

STOPING IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 257. 9 columns. I.

METHOD OF STOPING IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 297. 1 column.

STOPING IN THE BARBERTON GOLDFIELD, SOUTH AFRICA: All Methods Used. P. C. M. & M. Soc. S. A., vol. 10, p. 129. 2 columns. I.

SILVER-LEAD ORE MINING AND THE VARIOUS SYSTEMS OF STOPING AND TIMBERING EMPLOYED IN BROKEN HILL, NEW SOUTH WALES. By E. E. Beaumont. T. Au. I. M. E., vol. 9, p. 117. 26 pages. I.

See also **METHODS OF TIMBERING.**

STOPING METHODS IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 90, p. 452. 8½ columns. I.

STOPING IN THE LEAD MINES OF MECHERNICH, PRUSSIA. E. & M. J., vol. 86, p. 171. 1½ columns.

STOPING METHODS: Lead Mines, Cumberland, England. E. & M. J., vol. 85, p. 297. 3 columns. I.

THE METHOD OF BREAST STOPING AT CRIPPLE CREEK. By G. E. Walcott. E. & M. J., vol. 85, p. 102. 5 columns. I.

STOPING WITH SQUARE-SETS AT THE METCALF MINE, ARIZONA. E. & M. J., vol. 90, p. 120. 1 column. I.

See also **SQUARE-SET TIMBERING.**

UNDERHAND STOPING IN THE IRON MINES OF THE GOGEBIC RANGE. T. L. S. M. I., vol. 15, p. 189. 1 page. I.

UNDERHAND STOPING AT THE BURRA BURRA MINE, DUCKTOWN. E. & M. J., vol. 86, p. 1230. 1 column.

OVERHAND STOPING IN THE BROKEN HILL MINES. T. Au. I. M. E., vol. 9, p. 127. 6 pages. I.

OVERHAND STOPING IN SOUTH AFRICA. T. Au. I. M. E., vol. 5, p. 41. 2½ pages.

- OVERHAND STOPING AT THE YELTA COPPER MINE, SOUTH AUSTRALIA. T. Au. I. M. E., vol. 11, p. 99. $\frac{1}{2}$ page.
- OVERHAND STOPE OR VERTICALLY STEPPED-FACE METHOD OF MINING COAL. T. I. M. E., vol. 36, p. 400. 6 pages. I.
- OVERHAND AND UNDERHAND STOPING IN LARGER ORE BODIES. E. & M. J., vol. 86, p. 313. 1 column.
- OVERHAND STOPING AT THE MONTEZUMA MINES, COSTA RICA. E. & M. J., vol. 90, p. 715. 1 column.
- OVERHAND STOPING METHODS IN THE CENTRE STAR MINES, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 18. 2 columns.
- OVERHAND STOPING AT METCALF, ARIZONA. E. & M. J., vol. 90, pp. 121 and 123. I.
- BACK OR OVERHAND STOPING AT CANANEA. E. & M. J., vol. 90, p. 964. 2 columns. I.
- BACK STOPING. P. C. M. & M. Soc. S. A., vol. 7, p. 367. $\frac{1}{2}$ column.
- BACK STOPING VS. UNDERHAND STOPING IN LARGE BODIES OF IRON PYRITES. By J. J. Rutledge. E. & M. J., vol. 86, p. 365. $2\frac{1}{2}$ columns.
- A MODIFIED SYSTEM OF BACK STOPING. By J. E. Wilson. E. & M. J., vol. 90, p. 950. $1\frac{1}{2}$ columns. I.
- BACK STOPING IN THE COPPER MINES OF MICHIGAN. Min. & Sci. Press, vol. 96, p. 847. 1 column.
- STULL STOPING AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 435. 6 columns. I.
- RILL STOPING. E. & M. J., vol. 89, p. 357. $\frac{1}{2}$ column.
- RILL STOPING IN BROKEN HILL MINES. T. Au. I. M. E., vol. 9, p. 129. 2 pages. I.
- METHODS OF STOPING: Rill, Shrinkage and Flat Back Systems. E. & M. J., vol. 85, p. 196. 1 column.
- RILL STOPING AT KALGOORLIE. Min. & Sci. Press, vol. 100, p. 391. 1 column.
- RILL STOPING AT THE SUPERIOR AND BOSTON MINE, ARIZONA. M. & M., vol. 31, p. 112. 4 columns. I.
- SHRINKAGE STOPING AT THE CRESSON MINE, CRIPPLE CREEK, COLORADO. M. & M., vol. 31, p. 735. $3\frac{1}{2}$ columns. I.
- "SHRINKAGE" STOPING IN WESTERN AUSTRALIA. By F. P. Rolfe. T. I. M. & M., vol. 18, p. 291. 26 pages. I.
- SHRINKAGE STOPING AT THE LOS PILARES MINE, MEXICO. M. & M., vol. 31, p. 108. 7 columns. I.
- ADVANTAGES AND DISADVANTAGES OF SHRINKAGE STOPING. T. I. M. & M., vol. 18, p. 297. 4 pages.
- SHRINKAGE STOPING ON THE RAND. Min. Mag. London, vol. 4, p. 145. 2 columns. I.
- SHRINKAGE STOPING AT DUCKTOWN MINES. E. & M. J., vol. 89, p. 464. 1 column. I.
- SHRINKAGE STOPING. E. & M. J., vol. 89, p. 358. $\frac{1}{2}$ column.
- THE SHRINKAGE SYSTEM OF STOPING AS EMPLOYED AT KALGOORLIE. Min. & Sci. Press, vol. 100, p. 391. 1 column.
- SHRINKAGE STOPING AT THE LOS PILARES MINE, MEXICO. Min. & Sci. Press, vol. 100, p. 888. 2 columns. I.
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. By F. P. Rolfe. M. & M., vol. 30, p. 210. $6\frac{1}{2}$ columns. I.
- THE SHRINKAGE OR "LAY" SYSTEM OF STOPING. P. C. M. & M. Soc. S. A., vol. 10, p. 301. $\frac{1}{2}$ column.
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. P. C. M. & M. Soc. S. A., vol. 10, p. 30. $\frac{1}{2}$ column.
- THE SHRINKAGE SYSTEM OF STOPING AT CANANEA. E. & M. J., vol. 90, p. 964. 2 columns. I.

RESUING IN MINING. P. C. M. & M. Soc. S. A., vol. 8, p. 48. $\frac{1}{2}$ column.

RESUING IN MINING. P. C. M. & M. Soc. S. A., vol. 7, p. 367. 1 column.

STOPING AT THE CABIN BRANCH MINE, VIRGINIA. By J. Tyssowski. E. & M. J., vol. 89, p. 32. $1\frac{1}{2}$ columns.

STOPING IN BARITE MINES, MISSOURI. T. A. I. M. E., vol. 40, p. 728. $6\frac{1}{2}$ pages. I.

See also OCCURRENCE OF BARYTES, and METHODS OF MINING, ETC., also COST OF STOPING.

Under-Sea Mining

SUBMARINE COAL MINING. By J. Johnson. J. M. Soc. N. S., vol. 13, p. 47. 4 pages.

SUBMARINE MINING. Min. Mag., vol. 8, p. 56. 4 pages.

SUBMARINE DIVERS IN MINES. By G. F. Duck. M. & M., vol. 31, p. 446. $1\frac{1}{2}$ columns.

See also first volume of INDEX.

Mining Frozen Gravels

THAWING FROZEN GRAVEL IN THE NORTH. Min. & Sci. Press, vol. 98, p. 382. 3 columns. I.

THAWING FROZEN GRAVEL IN THE YUKON. Min. & Sci. Press, vol. 97, p. 354. 2 columns. I.

THAWING FROZEN GRAVEL. Min. & Sci. Press, vol. 97, p. 812. 2 columns. I.

See also first volume of INDEX.

See also LONGWALL MINING.

Packing Mine Workings: Flushing Culm, Use of Waste

SPACE OCCUPIED BY BROKEN STONE. M. & M., vol. 30, p. 334. $\frac{1}{2}$ column.

A FILLING METHOD OF MINING SOFT ORE. Min. & Sci. Press, vol. 99, p. 97. 4 columns. I.

THE FILLING SYSTEM APPLIED TO WIDE ORE BODIES. E. & M. J., vol. 87, p. 1178. 5 columns. I.

THE SPUELVERSATZ METHOD OF HYDRAULIC FILLING. E. & M. J., vol. 89, p. 306. 1 column. I.

FILLING METHOD OF MINING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 750. 2 columns.

THE FILLING SYSTEM AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 638. 2 columns. I.

FILLING STOPES IN THE AUSTRALIAN MINES. T. Au. I. M. E., vol. 7, p. 197. 18 pages. I.

FILLING STOPES WITH TAILING AT KALGOORLIE. Min. Mag., London, vol. 3, p. 452. 1 column. I.

THE FILLING SYSTEMS AT THE BROKEN HILL MINES, NEW SOUTH WALES. E. & M. J., vol. 86, p. 794. 4 columns. I.

FILLING STOPES IN THE AUSTRALIAN MINES. T. Au. I. M. E., vol. 7, p. 197. 18 pages. I.

FLUSHING IN METAL MINES. E. & M. J., vol. 86, p. 4. 1 column.

SILTING AT WAIHI. By A. Jarman. Min. Mag., London, vol. 3, p. 191. 8 columns. I.

FILLING METHOD OF MINING AT THE HOMESTAKE MINE. E. & M. J., vol. 90, p. 74. $7\frac{1}{2}$ columns. I.

FILLING IN THE CLIFTON-MORENCI MINES. Min. & Sci. Press, vol. 101, p. 831. $\frac{1}{2}$ column.

FILLING METHOD USED IN ARIZONA COPPER MINES. Min. & Sci. Press, vol. 99, p. 393. $\frac{1}{2}$ column.

ROCK FILLING AT RIO TINTO. By E. Levy. E. & M. J., vol. 89, p. 363. $2\frac{1}{2}$ columns.

FILLING METHOD OF MINING EMPLOYED IN THE COAHUILA DISTRICT, MEXICO. E. & M. J., vol. 89, p. 1073. $\frac{1}{2}$ column.

"DRY-WALL" FILLING METHOD IN THE SOUTH RANGE MINES, MICHIGAN. Min. & Sci. Press, vol. 96, p. 850. $\frac{1}{2}$ column. I.

See also METHODS OF MINING, ETC.

HYDRAULIC STOPE FILLING AT THE ROBINSON MINE. P. C. M. & M. Soc. S. A., vol. 10, p. 300. $\frac{1}{2}$ column.

FILLING STOPES AT THE SIMMER AND JACK. Min. Mag. London, vol. 4, p. 67. $1\frac{1}{2}$ columns. I.

FILLING METHOD EMPLOYED AT THE LOS PILARES MINE, MEXICO. M. & M., vol. 31, p. 109. $4\frac{1}{2}$ columns. I.

FILLING ABANDONED WORKINGS WITH CULM OR SAND: European Practice. By H. M. Payne. E. & M. J., vol. 89, p. 522. $4\frac{1}{2}$ columns. I.

SAND FILLING IN THE TRANSVAAL MINES. Min. & Sci. Press, vol. 101, p. 333. $\frac{1}{2}$ column.

SAND FILLING ON THE WITWATERSRAND. By E. Phur. P. C. M. & M. Soc. S. A., vol. 10, p. 429. $8\frac{1}{2}$ columns. I.

SAND FILLING ON THE CENTRAL RAND. E. & M. J., vol. 90, p. 59. 1 column.

SAND FILLING ON THE RAND. E. & M. J., vol. 90, p. 805. $\frac{1}{2}$ column.

SAND FILLING IN THE IRON MINES OF PEINE, GERMANY. T. A. I. M. E., vol. 39, p. 355. 2 pages.

See also DISPOSAL OF WASTE.

BACK FILLING BY FLUSHING IN THE SILESIA COAL MINES. E. & M. J. vol. 86, p. 889. $12\frac{1}{2}$ columns. I.

DISTRIBUTION OF FILLING IN THE SILESIA MINES: Dams, Pipes, Etc. E. & M. J., vol. 86, p. 891. 2 columns. I.

See also UNDERGROUND DAMS.

STOWING IN CARMAUX, FRANCE, COAL MINES. E. & M. J., vol. 86, p. 576. 4 columns. I.

ASHER FOR PILLARS IN COAL MINES. E. & M. J., vol. 86, p. 581. $\frac{1}{2}$ column.

THE FLUSHING PROBLEM IN THE ANTHRACITE REGION. E. & M. J., vol. 88, p. 564. $3\frac{1}{2}$ columns.

FLUSHING OLD WORKINGS. Coal Mining Supplement, E. & M. J., vol. 88, p. 21. $\frac{1}{2}$ column.

HYDRAULIC STOWING OF COB AT SHAMROCK I AND II COLLIERY, HERNE, WESTPHALIA, GERMANY. By H. C. Annett. T. I. M. E., vol. 37, p. 257. 20 pages. I.

THE ADVANTAGES OF FLUSHING IN COAL MINING. By L. W. Mayer. E. & M. J., vol. 86, p. 1. $12\frac{1}{2}$ columns. I.

See also METHODS OF MINING COAL, MINE SUPPORT, SUBSIDENCE IN MINE WORKINGS, and COST OF SUPPORT.

River Mining

See first volume of INDEX.

Deep Mining

LIMITS OF DEEP MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 414. $2\frac{1}{2}$ columns.

DEPTH OF MINES AT BUTTE. E. & M. J., vol. 85, p. 97. Table.

DEEP MINING AT GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 348. 1 column.

DEEP MINING AT BENDIGO. By W. J. Rickard. Min. Mag., London, vol. 3, p. 281. 4 columns. I.

DEEP MINING IN TRANSVAAL. By R. Gascoyne. Min. & Sci. Press, vol. 101, p. 332. $4\frac{1}{2}$ columns. I.

THE DEEP MINES OF KEWEENAW POINT, MICHIGAN. Min. & Sci. Press, vol. 96, p. 847. $\frac{1}{2}$ column.

DEEP MINING IN THE GUANAJUATO DISTRICT, MEXICO. By F. H. Robert. E. & M. J., vol. 90, p. 1310. $6\frac{1}{2}$ columns. I.

See also PERMANENCE IN DEPTH, and DEVELOPMENT.

Beach Mining

See first volume of INDEX.

See also COST OF EXCAVATING.

Excavation of Earth, Rock and Ore, Use of Steam Shovels, Mechanical Excavators and Unloaders

EARTHWORK: The Profile of Quantities. By S. B. Fisher. P. E. Soc. W. Pa., vol. 3, p. 45. 4½ pages. D.

THE CULEBRA CUT OF THE PANAMA CANAL. By A. S. Zinn. J. W. Soc. E., vol. 12, p. 820. 19 pages. I.

POWER SHOVEL FOR UNDERGROUND WORK. E. & M. J., vol. 86, p. 1056. 2 columns. I.

THE THEW AUTOMATIC STEAM SHOVEL FOR UNDERGROUND WORK. M. & M., vol. 29, p. 575. 2 columns.

STEAM SHOVEL WORK AT ELY, NEVADA. Min. & Sci. Press, vol. 98, p. 59. 2 columns. I.

STEAM SHOVEL WORK IN BINGHAM CANYON, UTAH. Min. & Sci. Press, vol. 98, p. 518. 1½ columns. I.

STEAM SHOVEL IN THE AMUER REGION. Min. & Sci. Press, vol. 98, p. 731. 1 column. I.

STEAM SHOVEL IN COPPER MINING, ELY, NEVADA. By F. S. Pheby. Min. & Sci. Press, vol. 97, p. 161. 1 column. I.

BREAKING GROUND FOR STEAM SHOVELS: Gophering. E. & M. J., vol. 88, p. 696. 1½ columns.

MINING COPPER ORE WITH STEAM-SHOVELS. By L. A. Palmer. Min. Mag. London, vol. 4, p. 293. 5 columns. I.

THE DRAG-LINE EXCAVATOR. By J. P. Hutchins. Min. Mag., London, vol. 3, p. 359. 6½ columns. I.

A NEW TYPE OF GIANT EXCAVATOR. By F. A. Talbot. E. & M. J., vol. 90, p. 564. 2½ columns. I.

See also first volume of INDEX, and OPEN-CUT MINING.

Open-cut Mining, Milling Methods Etc.

STRIPPING CLINTON IRON ORE IN NEW YORK STATE. By E. Higgins. E. & M. J., vol. 86, p. 1150. 8 columns. I.

STRIPPING IN BINGHAM CANYON. E. & M. J., vol. 87, p. 1186. 1 column.

STRIPPING COAL BEDS. M. & M., vol. 31, p. 69. 4 columns. I.

STRIPPING AND OPEN-CUT WORK IN THE JOPLIN DISTRICT. M. & M., vol. 30, p. 503. 4 columns. I.

NOVEL SPOIL TRANSPORTER FOR STRIPPING OPERATIONS. By F. A. Talbot. E. & M. J., vol. 88, p. 510. 7 columns. I.

OPEN-CUT MINING IRON ORES IN CUBA. M. & M., vol. 31, p. 247. 2 columns. I.

LOCATION OF OPEN-CUT PITTS. M. & M., vol. 29, p. 343. ¼ column.

OPEN-PIT IRON MINING ON THE MESABI RANGE. By J. F. Walf. M. & M., vol. 29, p. 291, 6 columns, I.; p. 343, 14 columns, I.

OPEN-CUT MINING AT THE PREMIER MINE, SOUTH AFRICA. E. & M. J., vol. 89, p. 370. 1½ columns. I.

OPEN-CUT MINING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 748. 2½ columns. I.

OPEN-CUT MINING IN THE LORRAINE OOLITIC IRON ORE DEPOSITS OF GERMANY AND FRANCE. E. & M. J., vol. 87, p. 1224. 2 columns.

OPEN-CUT MINING IN ALASKA AND THE YUKON. Min. & Sci. Press, vol. 98, p. 587. 8 columns. I.

OPEN-CUT MINING IN THE TURQUOISE MINES OF NEW MEXICO. E. & M. J., vol. 86, p. 845. 1½ columns.

TIN MINING IN ULN SELANGOR, FEDERATED MALAY STATES. By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.

TONNAGE ESTIMATION IN DUMPS, OPEN CUTS, ETC. By R. J. Donaldson. E. & M. J., vol. 87, p. 640. 8½ columns. I.

HYDRAULIC EXCAVATION ON THE PANAMA CANAL. Min. & Sci. Press, vol. 100, p. 609. 7½ columns. I.

MINING AND MILLING FLORIDA PHOSPHATES. By C. A. Stone. E. & M. J., vol. 87, p. 490. 8 columns. I.

STRIPPING A VEIN BY HYDRAULICKING. By A. F. Hughes. Min. & Sci. Press, vol. 99, p. 788. 2½ columns. I.

See also **HYDRAULIC MINING.**

THE MILLING SYSTEM AS EMPLOYED IN MINING THE IRON ORES OF SUNRISE, WYOMING. E. & M. J., vol. 85, p. 400. 3 columns. I.

NOTES ON THE MILLING SYSTEM OF MINING. By A. H. Fay. E. & M. J., vol. 88, p. 919. 2½ columns. I.

THE MILLING SYSTEM OF MINING AT MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 836. 1 column.

GLORY HOLE MINING AT DE LAMAR, NEVADA. By W. R. Wardner. E. & M. J., vol. 87, p. 451. 6 columns. I.

GLORY HOLE MINING AT PHOENIX, BRITISH COLUMBIA. E. & M. J., vol. 88, p. 1260. 1½ columns. I.

See also **MINING THICK AND MASSIVE DEPOSITS, EXCAVATION OF EARTH, ROCK AND ORE, ETC., COST OF METAL-MINING, and COST OF STRIPPING.**

Quarrying Methods

DEVELOPMENTS IN QUARRYING PROCESSES. By A. S. Atkinson. E. & M. J., vol. 88, p. 208. 5 columns.

See also first column of **INDEX**, and **COST OF MINE AND MILL CONSTRUCTION.**

Hydraulic Mining: Methods and Appliances, Glants, Elevators, Etc.

HYDRAULIC MINING. Min. & Sci. Press, vol. 20, p. 322. 1½ columns.

NOTES ON HYDRAULIC MINING. M. & M., vol. 28, p. 1. 8 pages. I.

A WORD ABOUT HYDRAULIC MINING. Min. & Sci. Press, vol. 20, p. 5. 1½ columns. I.

HYDRAULIC MINING OF AURIFEROUS GRAVELS. By J. W. Phillips. J. W. Soc. E., vol. 15, p. 431. 40 pages. I.

EXAMINING AND FITTING UP A HYDRAULIC MINE. By H. A. Brigham. E. & M. J., vol. 86, p. 1257, 10½ columns; vol. 87, p. 23, 19½ columns. I.

MOBILITY IN PLACER MINING. By J. P. Hutchins. Min. Mag., London, vol. 3, p. 60. 3½ columns. I.

HYDRAULIC MINING ON THE PACIFIC COAST. By A. H. Martin. M. & M., vol. 30, p. 261. 4½ columns. Maps.

ART OF PLACER PIPING. By D. H. Stovall. Min. & Sci. Press, vol. 99, p. 661. 2½ columns. I.

USE OF BY-WATER SUPPLY FOR HYDRAULIC MINING. By D. H. Stovall. Min. & Sci. Press, vol. 101, p. 119. 2½ columns. I.

ALLUVIAL MINING: Its Necessary Plant and Appliances. By S. C. N. Bell. T. Au. I. M. E., vol. 12, p. 30. 32 pages.

THE HYDRAULIC EQUIPMENT OF THE OLD CHANNEL MINES. By J. M. Nicol. Min. & Sci. Press, vol. 95, p. 333. 6 columns. I.

PUMP SLUICES FOR GOLD. By H. Herman. Min. & Sci. Press, vol. 98, p. 252. 2½ columns.

GRAVEL PUMP MINING, WESTERN AUSTRALIA. T. Au. I. M. E., vol. 8, pt. 1, p. 33. 4 pages.

See also **PUMPS FOR MINE USE.**

SLUICES AND UNDERCURRENTS. T. Au. I. M. E., vol. 4, p. 50. 6 pages.

AUSTRALIAN SLUICES. P. C. M. & M. Soc. S. A., vol. 8, p. 171. 4 columns. I.

A SLUICE FOR HYDRAULIC MINING. E. & M. J., vol. 86, p. 1259. 1½ columns.

SLUICES USED IN THE LA GRANGE HYDRAULIC MINE. Min. & Sci. Press, vol. 97, p. 492. 3 columns. I.

- THE BLOWING-DOWN SYSTEM OF SLUICING.** By J. Park. Min. & Sci. Press, vol. 97, p. 218. 2 columns. I.
- THE LONG TOM AND HYDRAULIC MINING IN CALIFORNIA.** By R. H. Campbell. Min. & Sci. Press, vol. 100, p. 934. 3 columns. I.
- DROP SLUICES: Undercurrents.** By D. H. Stovall. Min. & Sci. Press, vol. 100, p. 801. 1½ columns. I.
- UNDERCURRENTS USED IN THE SOUTH AFRICAN TIN FIELDS.** E. & M. J., vol. 89, p. 471. 1 column. I.
- UNDERCURRENTS FOR HYDRAULIC MINING.** E. & M. J., vol. 87, p. 25. 1½ columns. I.
- SLUICE CONSTRUCTION FOR HYDRAULIC MINING.** E. & M. J., vol. 87, p. 23. 7 columns. I.
- HAND SLUICING AT NOME AND THE YUKON.** Min. & Sci. Press, vol. 98, p. 86. 8 columns. I.
- DITCHES IN HYDRAULIC MINING.** E. & M. J., vol. 87, p. 28. 1½ columns.
- THE YUKON DITCH.** By T. A. Rickard. Min. & Sci. Press, vol. 98, p. 117, 7½ columns, I.; p. 148, 6½ columns, I.
- THE BONANZA DITCH OF THE YUKON GOLD COMPANY.** By E. Jacobs. E. & M. J., vol. 88, p. 457. 2 columns. I.
- DRAIN TUNNEL IN HYDRAULIC MINING.** E. & M. J., vol. 86, p. 1259. 1 column.
- FLUMES IN HYDRAULIC MINING.** E. & M. J., vol. 87, p. 28. 2 columns. I.
- See also **FLUMES: MATERIALS OF CONSTRUCTION AND DESIGN, and DITCHES AND CHANNELS.**
- HYDRAULICKING PIPE-CLAY GRAVEL.** D. H. Stovall. Min. & Sci. Press, vol. 100, p. 159. 2½ columns. I.
- HYDRAULICKING THE COVER OFF A VEIN.** Min. & Sci. Press, vol. 99, p. 788. 2½ columns. I.
- HYDRAULIC ELEVATORS.** E. & M. J., vol. 87, p. 27. 1 column.
- GRAVEL ELEVATION IN SISKIYOU COUNTY, CALIFORNIA.** By C. S. Haley. Min. & Sci. Press, vol. 101, p. 701. 2½ columns. I.
- THE RUBLE HYDRAULIC ELEVATOR.** By J. McD. Porter. E. & M. J., vol. 88, p. 1213. 5 columns. I.
- THE RUBLE BOULDER AND GRAVEL ELEVATOR.** E. & M. J., vol. 86, p. 902. 3 columns. I.
- THE RUBLE HYDRAULIC ELEVATOR.** By J. M. Porter. T. A. I. M. E., vol. 40, p. 561. 5 pages. I.
- See also **ELEVATORS.**
- HYDRAULIC SUCTION ELEVATOR.** By D. B. Waters. T. A. I. M. E., vol. 11, p. 114. 6 pages. I.
- A ROCKER.** By D. Waterman. Min. & Sci. Press, vol. 98, p. 293. 1½ columns. I.
- THE BUTARA OR WASHING MACHINE FOR GOLD GRAVELS IN SIBERIA.** Min. & Sci. Press, vol. 99, p. 423. ½ column. I.
- STEAM SCRAPER FOR PLACER MINING.** By H. W. Turner. Min. & Sci. Press, vol. 97, p. 191. ½ column. I.
- BUCKET SCRAPER FOR USE IN PLACER MINING.** Min. & Sci. Press, vol. 101, p. 43. 2 columns. I.
- See also **EXCAVATION OF EARTH, ROCK, ETC.**
- STACKER FOR HYDRAULICKING.** By S. S. Smith. Min. & Sci. Press, vol. 100, p. 290. 3 columns. I.
- See also **DREDGING FOR GOLD AND OTHER MATERIALS.**
- DIFFERENT METHODS OF ALLUVIAL MINING IN VICTORIA.** By S. Hunter. T. A. I. M. E., vol. 8, pt. 2, p. 188. 2 pages.
- ALLUVIAL WORKINGS AT ADDISON'S FLAT, NEW ZEALAND.** By A. G. Macdonald. E. & M. J., vol. 87, p. 198. 4 columns. I.
- METHODS OF WORKING ALLUVIAL DEPOSITS OF VICTORIA.** T. I. M. & M., vol. 17, p. 224. 4 pages. I.

- HYDRAULIC MINING AS APPLIED TO WESTERN AUSTRALIA.** By R. N. Wells. T. Au. I. M. E., vol. 8, pt. 1, p. 31. 9 pages.
- SOME NOTES ON HYDRAULICKING AND GROUND SLUICING IN NEW ZEALAND, AND COMPARISONS WITH THE DRIFT GRAVEL OF THE CORINNA DISTRICT IN TASMANIA.** By E. M. Thornley. T. Au. I. M. E., vol. 4, p. 50. 6 pages.
- HYDRAULIC SLUICING IN AUSTRALIA.** T. Au. I. M. E., vol. 12, p. 34. 14 pages.
- HYDRAULICKING IN CALIFORNIA.** By H. P. Gordon. Min. & Sci. Press, vol. 100, p. 751. 3½ columns. I.
- HYDRAULICKING IN TRINITY COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 101, p. 143. 2 columns.
- CLEANING UP AN OLD MILL YARD: Hydraulic a Mill Site for Gold in California.** By W. H. Storms. E. & M. J., vol. 89, p. 646. 3 columns. I.
- MINING DIAMONDS AT BAHIA, BRAZIL.** E. & M. J., vol. 87, p. 986. 3 columns. I.
- See also OCCURRENCE OF DIAMONDS and BRAZIL.**
- HYDRAULICKING PLATINUM DEPOSITS IN BRITISH COLUMBIA.** J. C. M. I., vol. 13, p. 313. 5 pages. I.
- HYDRAULIC MINING AT SAN ANTONIO, PERU.** Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- PHILIPPINE PLACER MINING.** Min. & Sci. Press, vol. 99, p. 267. ¼ column.
- THE BRANDY CITY HYDRAULIC MINE.** By G. F. Taylor. E. & M. J., vol. 89, p. 1152. 3 columns. I.
- METHOD OF WORKING LUMPKIN COUNTY PLACERS, GEORGIA.** Min. Mag., vol. 10, p. 469.
- GOLD MINING BY THE HYDRAULIC PROCESS IN NORTH CAROLINA AND GEORGIA.** By T. L. Clingman. Min. Mag., vol. 10, p. 27. 4 pages.
- PROSPECTING AND MINING GOLD PLACERS IN ALASKA.** By J. P. Hutchins. U. S. G. S., Bull. 345, p. 54. 24 pages. 1907.
- See also PROSPECTING, ETC.**
- HYDRAULIC MINING IN ALASKA.** By T. A. Rickard. Min. Mag., London, vol. 1, p. 139. 6 columns. I.
- PLACER MINING IN ALASKA IN 1904.** By A. H. Brooks. U. S. G. S., Bull. 259, p. 18. 13 pages.
- METHODS AND COSTS OF GRAVEL AND PLACER MINING IN ALASKA.** By C. W. Purington. U. S. G. S., Bull. 263. 273 pages. I. 1905.
- NOME PLACER MINING.** By T. M. Gibson. Min. & Sci. Press, vol. 101, p. 809. 3½ columns.
- PLACER MINING IN THE YUKON-TANANA REGION, ALASKA.** By C. E. Ellsworth. U. S. G. S., Bull. 442, p. 230. 16 pages. 1909.
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- PLACER GOLD MINING IN INTERIOR ALASKA.** E. & M. J., vol. 87, p. 591. 9 columns.
- PLACER MINING OPERATIONS IN ALASKA IN 1909.** By A. H. Brooks. E. & M. J., vol. 90, p. 412. 8½ columns. Map.
- MINING AND MINING METHODS OF THE YUKON.** By A. A. Bare. J. C. M. I., vol. 11, p. 545. 24 pages. I.
- HYDRAULIC MINING IN COLOMBIA.** Min. & Sci. Press, vol. 98, p. 220. ½ column. I.
- THE CARIBOO CONSOLIDATED HYDRAULIC PLANT, BULLION, BRITISH COLUMBIA.** By W. J. Dick. J. C. M. I., vol. 10, p. 418. 8 pages.
- HYDRAULIC MINING IN CARIBOO.** By D. Waterman. Min. & Sci. Press, vol. 95, p. 302. 5 columns. I.
- TIN SLUICING IN TASMANIA.** By E. Edwards. M. & M., vol. 31, p. 309. 12 columns. I.

HYDRAULIC MINING FOR TIN IN THE MALAY STATES. Min. & Sci. Press, vol. 98, p. 32. 7 columns. I.

GROUND-SLUICING IN THE MALAY STATES. Min. & Sci. Press, vol. 98, p. 34. 3 columns. I.

See also **MALAYSIA AND OCCURRENCE OF TIN.**

TIN PLACER MINING IN THE BOLIVIAN ANDES. E. & M. J., vol. 90, p. 1054. $\frac{1}{2}$ column.

HYDRAULIC MINING IN TIN MINES OF CAPE COLONY. P. C. M. & M. Soc. S. A., vol. 8, p. 171. 8 columns. I.

See also **COST OF PIPES AND PIPE LAYING.**

See also **COST OF FLUME CONSTRUCTION AND COST OF HYDRAULIC MINING, ALSO COST OF MINE AND MILL CONSTRUCTION.**

Dredging for Gold and Other Materials: Practice and Appliances

HISTORY OF SUCTION-DREDGING IN GOLD-BEARING GRAVEL. T. A. I. M. E., vol. 40, p. 499. 4 $\frac{1}{2}$ pages.

DEVELOPMENTS IN GOLD DREDGING DURING 1908. By J. P. Hutchins. E. & M. J., vol. 87, p. 200. 9 columns.

DEVELOPMENT OF DREDGES FOR PLACER DEPOSITS. By G. B. Massey. E. & M. J., vol. 87, p. 833. 7 $\frac{1}{2}$ columns. I.

EVOLUTION OF THE CALIFORNIA DREDGE. By G. L. Hurst. M. & M., vol. 29, p. 401. 2 $\frac{1}{2}$ columns. I.

RECENT DEVELOPMENTS IN GOLD DREDGING. By F. W. Griffin. Min. & Sci. Press, vol. 97, p. 219. 6 $\frac{1}{2}$ columns. I.

NOTES ON THE CONSTRUCTION OF CALIFORNIA DREDGES. By J. Tyssowski. E. & M. J., vol. 90, p. 765. 9 columns. I.

SPECIFICATIONS FOR A HYDRAULIC GOLD DREDGE. T. A. I. M. E., vol. 40, p. 506. 10 pages.

NEW MACHINERY FOR RIVER EXPLORATION: Dredging, Etc. Min. Mag., vol. 4, p. 61. 7 $\frac{1}{2}$ pages. I.

DREDGING FOR GOLD. Min. Mag., London, vol. 2, p. 217. 7 columns. I.

HYDRAULIC DREDGING FOR GOLD. By H. G. Granger. Min. & Sci. Press, vol. 99, p. 35. 1 $\frac{1}{2}$ columns.

BY-PRODUCTS OF GOLD DREDGING. E. & M. J., vol. 86, p. 119. $\frac{1}{2}$ column.

HYDRAULIC DREDGING FOR GOLD-BEARING GRAVELS. By H. O. Granger. T. A. I. M. E., vol. 40, p. 496. 20 $\frac{1}{2}$ pages. I.

HYDRAULIC DREDGING OR THE WORKING OF DEEP ALLUVIAL DEPOSITS BY ELEVATORS WITH CENTRIFUGAL PUMPS. By A. S. Kenyon. T. A. I. M. E., vol. 5, p. 275. 12 pages. I.

GOLD DREDGING AS AN INVESTMENT. By A. C. Ludlum. E. & M. J., vol. 85, p. 315. 2 $\frac{1}{2}$ columns.

PROSPECTING DREDGE. E. & M. J., vol. 86, p. 705. $\frac{1}{2}$ column.

FUTURE OF DREDGING. By C. Janin. Min. & Sci. Press, vol. 101, p. 868. 6 $\frac{1}{2}$ columns.

DREDGING AND SAMPLING OF PLACER GROUND. By A. P. Rogers. E. & M. J., vol. 89, p. 561. 5 columns. I.

See also **METHODS OF SAMPLING.**

EXAMINATION OF GOLD DREDGING PROPERTIES. By T. S. Ruh. E. & M. J., vol. 87, p. 893. 5 columns. I.

See also **VALUE OF MINES, ETC.**

FAILURES IN SPUDS FOR GOLD DREDGES. By H. D. Smith. Min. & Sci. Press, vol. 98, p. 728. 2 $\frac{1}{2}$ columns. I.

CLAY CUTOUT, ISABEL DREDGE. By W. B. Winston. Min. & Sci. Press, vol. 101, p. 838. 3 $\frac{1}{2}$ columns. I.

OVERFLOW FROM DREDGE PITS AT OROVILLE. Min. & Sci. Press, vol. 98, p. 326. 1 $\frac{1}{2}$ columns.

RESTORING DREDGED GROUND. E. & M. J., vol. 87, p. 946. 4 columns. I.

RESTORING DREDGED GROUND. By A. S. Atkinson. M. & M., vol. 31, p. 422. 2 $\frac{1}{2}$ columns. I.

See also CONSERVATION.

DREDGING FROKEN GROUND IN KLONDIKE. E. & M. J., vol. 85, p. 512. 4½ columns.

DREDGING CONDITIONS ON THE SEWARD PENINSULA. By G. B. Massey. E. & M. J., vol. 90, p. 859. 20½ columns. I.

DREDGING NOME BEACH SANDS. M. & M., vol. 30, p. 494. 4 columns. I.

DREDGING ON THE SEWARD PENINSULA. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 734. 14 columns. I.

DREDGING IN THE YUKON. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 290, 5½ columns, I.; p. 354, 6 columns, I.

PONY DREDGES IN ALASKA. By W. H. Washburn. Min. & Sci. Press, vol. 100, p. 352. 5 columns. I.

DREDGING AT NOME IN 1909. Min. & Sci. Press, vol. 100, p. 47. 6½ columns. I.

HYDRAULIC DREDGING IN AUSTRALIA. T. Au. I. M. E., vol. 12, p. 58. 5 pages.

BUCKET DREDGING IN NEW ZEALAND. T. Au. I. M. E., vol. 12, p. 49. 8 pages.

GOLD DREDGING IN OTAGO, NEW ZEALAND. By F. T. Seelye. T. Au. I. M. E., vol. 9, p. 181. 14 pages. I.

THE GOLD DREDGING INDUSTRY IN NEW ZEALAND. By W. Wylie. T. Au. I. M. E., vol. 7, p. 102. 10 pages.

THE CAREER OF THE GOLD DREDGE IN NEW SOUTH WALES. By D. K. Blair. T. Au. I. M. E., vol. 10, p. 289. 19½ pages.

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DREDGING AT BUTTE. By A. F. Bushnell. E. & M. J., vol. 87, p. 991. 3½ columns. I.

GOLD DREDGING PRACTICE IN CALIFORNIA. By Robt. Sibley. E. & M. J., vol. 85, p. 1083. 15½ columns. I.

DREDGING AT OROVILLE. By D. Waterman. Min. & Sci. Press, vol. 98, p. 785. 7½ columns. I.

LESS KNOWN GOLD DREDGES IN CALIFORNIA. By W. M. Knox. Min. & Sci. Press, vol. 101, p. 16. 3 columns. I.

GOLD DREDGING ON THE CHOCO RIVER, REPUBLIC OF COLOMBIA, SOUTH AMERICA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 392. 27 pages. I.

DREDGING CONDITIONS IN COLOMBIA. By A. P. Rogers. E. & M. J., vol. 87, p. 1003. 2 columns.

GOLD DREDGING GROUND IN THE UPPER AMAZON VALLEY. E. & M. J., vol. 87, p. 643. 2½ columns.

DREDGING AT BRECKENRIDGE, COLORADO. By A. H. Bradford and R. P. Curtis. Min. & Sci. Press, vol. 99, p. 361. 11 columns. I.

CONDITIONS OF GOLD DREDGING IN FRENCH GUIANA. By A. Bordeaux. E. & M. J., vol. 90, p. 562. 6½ columns. I.

DREDGING IN THE RIVERS OF FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 583. 8 pages.

DREDGING POSSIBILITIES IN KOREA. By R. Y. Hanlon. Min. & Sci. Press, vol. 100, p. 831. 3½ columns. I.

GOLD DREDGING IN THE PHILIPPINES. E. & M. J., vol. 88, p. 974. 3 columns. I.

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GOLD DREDGING IN RUSSIA. By I. I. Rogovin. E. & M. J., vol. 87, p. 1050. 1½ columns.

DREDGING AT NEVIANSK. By C. W. Purington. Min. Mag., London, vol. 2, p. 206. 4 columns. I.

DREDGING FOR PLATINUM IN THE URALS, RUSSIA. By L. Tovey. E. & M. J., vol. 86, p. 701. 15 columns. I.

GOLD DREDGING IN SIBERIA. By J. B. Landfield. Min. & Sci. Press, vol. 99, p. 423. 4½ columns. I.

PRODUCTION OF URAL AND SIBERIAN DREDGES FOR 1909. Min. & Sci. Press, vol. 101, p. 764. 3½ columns. Tables.

See also **COST OF DREDGING.**

Mining Débris: Damages and Litigation

A CALIFORNIA DÉBRIS DECISION. E. & M. J., vol. 85, p. 408. 1½ columns.

DÉBRIS CONTROL IN THE SACRAMENTO VALLEY. By A. D. Foote. Min. & Sci. Press, vol. 99, p. 688. 2½ columns. I.

ANTI-DÉBRIS ACTION IN CALIFORNIA. E. & M. J., vol. 86, p. 181. ¼ column.

See also first volume of **INDEX.**

Reworking Abandoned Mines

REOPENING THE MEXICAN MINE, COMSTOCK LODGE. By W. Symmes. Min. & Sci. Press, vol. 100, p. 419. 8½ columns. I.

See also first volume of **INDEX.**

Waste in Mining

WASTE IN MINING. E. & M. J., vol. 86, p. 461. ¼ column.

WASTAGE OF THE PRECIOUS METALS. By A. B. Paul. Min. & Sci. Press, vol. 22, p. 339, 2 columns; p. 355, 1½ columns; p. 371, 1½ columns.

PLATINUM AND GOLD LOSSES IN DREDGING. By W. B. Winston. Min. & Sci. Press, vol. 99, p. 234. 1½ columns.

WASTE IN COAL MINING. T. A. I. M. E., vol. 40, p. 259. 1½ pages.

MAXIMUM RECOVERY OF COAL, GEORGES CREEK REGION. By H. V.

Hesse. M. & M., vol. 29, p. 373. 11½ columns. I.

MINING METHODS FOR MAXIMUM RECOVERY OF COAL. By H. V. Hesse. E. & M. J., vol. 87, p. 303. 18½ columns. I.

LOSS OF COAL IN MINING FLAT SEAMS. E. & M. J., vol. 86, p. 138. 4 columns.

WASTE OF ANTHRACITE MINING: One-third of Production Sent to Culm Bank. Coal Mining Supplement, E. & M. J., vol. 88, p. 7. 1½ columns.

MINING WASTES IN ILLINOIS. T. A. I. M. E., vol. 40, p. 31. 12 pages. D.

WASTE IN THE PITTSBURG DISTRICT: Fifty Percent Coal Lost. E. & M. J., vol. 89, p. 476. ¼ column.

EARLY WASTE OF PETROLEUM. By X. W. Putnam. M. & M., vol. 30, p. 491. 3 columns. I.

LOSS IN SLUICING IN TIN MINING, CAPE COLONY. P. C. M. & M. Soc. S. A., vol. 8, p. 175. ¼ column.

See also **METHODS OF MINING: GENERAL AND MISCELLANEOUS, METHODS OF MINING COAL and CONSERVATION.**

Difficulties Encountered in Mining: High Temperatures, Etc., Increase of Temperature with Depth

TEMPERATURE IN THE COMSTOCK LODGE, NEVADA. T. A. I. M. E., vol. 41, p. 6. 7 pages.

INCREASE OF TEMPERATURE WITH DEPTH ON THE TRANSVAAL. Min. & Sci. Press, vol. 101, p. 332. ¼ column.

ON MEASUREMENTS OF THE INCREASE OF TEMPERATURE IN BORE-HOLES: With the Depth, the Technics, and Practical Importance of the Same for Geological Prognosis, with Reference to New Measurements in Mexico, Borneo, and in Central Europe. By J. Koenigsberger and M. Mühlberg. T. I. M. E., vol. 39, p. 617. 29 pages.

ROCK TEMPERATURES AND DEEP MINING. E. & M. J., vol. 88, p. 32. 1 column.

TEMPERATURE AT GREAT DEPTH IN COAL MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 118. 1 column.

ROCK TEMPERATURES ON THE RAND. E. & M. J., vol. 90, p. 543. $\frac{1}{2}$ column.

RISE OF EARTH TEMPERATURE. E. & M. J., vol. 85, p. 1093. $\frac{1}{2}$ column.

TEMPERATURE IN DEEP COLLIERY WORKINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 225. 1 column.

RATE OF RISE OF TEMPERATURE WITH DEPTH. P. C. M. & M. Soc. S. A., vol. 8, p. 226. Note.

EXPERIMENTS ON THE TEMPERATURE OF THE EARTH AT GREAT DEPTHS. By G. W. Alexander. Min. Mag., vol. 9, p. 523. 3 pages.

NOTES ON SOME OBSERVATIONS OF TEMPERATURE, ETC., IN THE DEEP MINES OF BENDIGO. By J. Stirling. T. Au. I. M. E., vol. 4, p. 94. 16 pages. I.

ADDENDUM TO PAPER ON EARTH TEMPERATURES ON WITWATERSRAND GOLD FIELDS. By H. F. Marriott. T. I. M. & M., vol. 17, p. 428. 1 page.

DRIFTING THROUGH RED-HOT ROCK, HOMESTAKE MINE. E. & M. J., vol. 85, p. 636. 1 column.

DRILLING IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 757. 2 columns. I.

See also **MACHINE AND POWER DRILLS.**

PREVENTING CRUSH AND CREEP IN THE NORTHUMBERLAND, ENGLAND. E. & M. J., vol. 85, p. 411. 1 column.

SQUEEZES IN MINES AND THEIR CAUSES. By R. D. N. Hill. M. & M., vol. 30, p. 286. $2\frac{1}{2}$ columns. I.

RECLAIMING CAVED GROUND AFTER A SQUEEZE. By J. J. Rutledge. E. & M. J., vol. 86, p. 411. 4 columns. I.

See also **SUBSIDENCE IN MINE WORKINGS.**

MINING AROUND GAS WELLS. M. & M., vol. 31, p. 486. $\frac{1}{2}$ column. I.

See also **OCCURRENCE OF NATURAL GAS, CHURN DRILLS AND DRILLING, and PROSPECT DRILLING.**

Abandoned Mines and Districts

PSYCHOLOGY OF MINING BOOMS. By J. H. Curle. Min. & Sci. Press, vol. 96, p. 8. $2\frac{1}{2}$ columns.

PSYCHOLOGY OF MINING BOOMS. By C. Sachs. Min. & Sci. Press, vol. 96, p. 156. 4 columns.

See also first volume of **INDEX.**

Salting of Mines

MINE SALTING. By T. L. Carter. Min. Mag. London, vol. 4, p. 447. 4 columns.

See also first volume of **INDEX, and MINING RISKS AND FRAUDS.**

MINE AND MILL MACHINERY

Mining Machinery: Its Manufacture and Use

AUTOGENEOUS WELDING FOR MINING MACHINERY. E. & M. J., vol. 88, p. 119. 2 columns. I.

REPAIR WORK IN COLLIERY PRACTICE. By J. A. Seager. E. & M. J., vol. 90, p. 1171. 6 columns. I.

See also first volume of **INDEX.**

Pulleys and Belts

See first volume of **INDEX.**

Bearings and Lubrication

THE COEFFICIENT OF FRICTION. By W. Clifford. M. & M., vol. 31, p. 176. $3\frac{1}{2}$ columns. I.

DEVICES FOR SAVING LUBRICATING OIL. E. & M. J., vol. 85, p. 149. 2 columns. I.

SHAFTING FRICTION. E. & M. J., vol. 85, p. 544. 1½ columns. I.

See also first volume of INDEX.

Friction Clutches

See first volume of INDEX.

Friction Brakes

See first volume of INDEX.

Protection of Iron and Steel Structures

See first volume of INDEX.

Mining Machinery at the Face

COAL MINING MACHINES. T. A. I. M. E., vol. 41, p. 677. 26 pages. I.

THE OPERATION OF COAL-CUTTING MACHINERY. By G. E. Lynch. E. & M. J., vol. 86, p. 530. 6½ columns.

THE ADVANTAGES OF MACHINE MINING. By F. W. Parsons. E. & M. J., vol. 89, p. 622. 8½ columns. I.

COAL-CUTTING MACHINERY. By R. Peele. Sch. Mines Quart., vol. 31, p. 1. 24½ pages. I.

THE USE OF COAL-CUTTING MACHINERY. By R. H. Rowland. E. & M. J., vol. 90, p. 1067. 9½ columns. I.

A NEW MACHINE FOR USE IN ROOM-AND-PILLAR WORK. E. & M. J., vol. 86, p. 24. 2 columns. I.

COAL CUTTING BY MACHINERY IN ENGLAND. By J. Hinton. E. & M. J., vol. 87, p. 649. 2½ columns.

MINING COAL WITH MACHINES IN ENGLAND. By G. R. Dixon. E. & M. J., vol. 87, p. 797. 10 columns. I.

A COMPARISON OF COAL-CUTTING MACHINES. By S. F. Walker. E. & M. J., vol. 87, p. 1042. 13½ columns.

ENERGY OF THE BLOW IN A COAL PUNCHER. E. & M. J., vol. 87, p. 694. ½ column.

COAL CUTTING IN NORTHERN COAL FIELD, ENGLAND. By G. R. Dixon. E. & M. J., vol. 86, p. 1104. 5½ columns.

COAL MINING MACHINES AND WELSH LABOR. E. & M. J., vol. 87, p. 897. 2½ columns.

See also MINE WORKMEN, AND LABOR TROUBLES, ETC.

DEVELOPMENT OF COAL MINING MACHINES. By J. L. Wagner. M. & M., vol. 30, p. 349. 1½ columns.

RECENT DEVELOPMENTS IN THE UNDERCUTTING OF COAL BY MACHINERY. By E. W. Parker. T. A. I. M. E., vol. 41, p. 677. 26 pages. I.

MACHINE MINING UNDER DIFFICULTIES. By J. Gibson. T. I. M. E., vol. 37, p. 224. 10 pages. I.

WORKING AT THE FACE WITH A POST PUNCHER. E. & M. J., vol. 89, p. 1332. 1 column. I.

COAL PUNCHING MACHINES. E. & M. J., vol. 89, p. 623. 1½ columns.

USE OF THE "POST PUNCHER" IN UNDERCUTTING STEEP COAL BEDS. M. & M., vol. 31, p. 77. 2 columns. I.

A NOVEL COAL AND STONE CUTTING PROCESS. By A. Gradenwitz. E. & M. J., vol. 87, p. 1236. 7½ columns. I.

See also ELECTRIC COAL MINING MACHINES, BREAKING DOWN COAL AT THE FACE, and COST OF COAL MINING.

Electric Coal-Mining Machines

THE PNEUMOELECTRIC COAL PUNCHER. E. & M. J., vol. 86, p. 580. 4½ columns. I.

See also BREAKING DOWN COAL AT THE FACE, MINING MACHINES AT THE FACE, and COST OF COAL MINING.

Mechanical Mining Appliances: Getters

THE HYDRAULIC MINING CARTRIDGE. M. & M., vol. 30, p. 158. 2 columns. I.

THE HYDRAULIC MINING CARTRIDGE. By H. M. Payne. M. & M., vol. 30, p. 586. 2½ columns. I.

THE HYDRAULIC MINING CARTRIDGE. E. & M. J., vol. 88, p. 611. 3 columns. I.

See also BREAKING DOWN COAL AT THE FACE, MINING MACHINERY AT THE FACE, and COST OF COAL MINING.

MINE SUPPORT**Mine Support: Conditions Affecting, Etc.**

DATA OF PETRODYNAMICS. By R. D. N. Hall. M. & M., vol. 31, p. 505. 3½ columns.

DATA OF PETRODYNAMICS. By R. D. N. Hall. M. & M., vol. 31, p. 210. 2½ columns. I.

A SAFE WORKING ROCK COVER LIMIT: Method of Calculation. By F. Lynde. E. & M. J., vol. 89, p. 1188. 4 columns. I.

THE DOME OF EQUILIBRIUM AND THE CAVING SYSTEM OF MINING. By C. T. Rice. Min. & Sci. Press, vol. 95, p. 85. 2½ columns.

See also THE CAVING SYSTEMS OF MINING.

PRESSURE OF SUPERINCUMBENT STRATA IN THE TRANSVAAL MINES. Min. & Sci. Press, vol. 101, p. 333. 2 columns.

ROCK PRESSURE AND METAMORPHISM. By H. M. Chance. Min. & Sci. Press, vol. 97, p. 299. 6 columns.

MINE SUPPORT TESTS IN THE ANTHRACITE FIELDS, PENNSYLVANIA. M. & M., vol. 31, p. 749. 5½ columns. I.

STEEL HAMMER AND PICK FOR TESTING ROOF. M. & M., vol. 29, p. 79. ¼ column. I.

See also PROTECTION IN MINING.

SUPPORT OF THE SIDES OF LARGE CHAMBERS IN LIGNITE MINES. M. & M., vol. 29, p. 255. I.

MINE SUPPORT IN THE MINES OF BOICZA, HUNGARY. Min. & Sci. Press, vol. 100, p. 34. ¼ column.

DAMAGE TO SURFACE BUILDINGS CAUSED BY UNDERGROUND WORKINGS. By W. Hay. T. I. M. E., vol. 36, p. 427. 9 pages. I.

See also SUBSIDENCE IN MINE WORKINGS.

SUPPORTING THE ROOF IN LONGWALL WORKING IN ENGLAND. E. & M. J., vol. 85, p. 1146. 1 column. I.

See also LONGWALL MINING.

Kinds of Support, Timbers, Etc.

LUMBER: Kinds of Timber, Etc. By F. R. Babcock. P. E. Soc. W. Pa., vol. 26, p. 187. 16 pages.

EUCALYPTUS FOR MINE TIMBERS. By A. H. Martin. Min. & Sci. Press, vol. 97, p. 527, 1 column; p. 870, 2 columns.

MINING TIMBER, ITS USE AND PRESERVATION. By H. W. Ferd. T. Au. I. M. E., vol. 5, p. 3. 4 pages.

See also PRESERVATION OF MINE TIMBER.

TIMBER AND MINE COSTS. Min. & Sci. Press, vol. 96, p. 504. 1½ columns.

See also COST OF TIMBER.

SOME METHODS OF TIMBERING AND WORKING WIDE LODES IN NEW SOUTH WALES. By J. R. Godfrey. T. Au. I. M. E., vol. 7, p. 193. 22 pages. I.

SAFE METHODS OF TIMBERING. T. Au. I. M. E., vol. 6, p. 25. 3 pages. I.

See also PROTECTION IN MINING.

SELECTION AND FRAMING OF TIMBER.

By W. L. Fleming. E. & M. J., vol. 88, p. 423. 2½ columns. I.

TIMBER CUTTING ON FOREST RESERVES FOR MINING PURPOSES. E. & M. J., vol. 87, p. 639. ½ column.

HOW REFORESTATION MAY BE APPLIED TO THE MINE TIMBER INDUSTRY. By T. B. Wyman. T. L. S. M. I., vol. 14, p. 116. 13½ pages. I.

USE OF TIMBER CRIBS IN THE AUSTRALIAN MINES. T. A. I. M. E., vol. 7, p. 193. 20 pages. I.

TIMBER SUPPLY FOR MONTANA MINES. M. & M., vol. 29, p. 92. 1½ columns.

REINFORCED CONCRETE MINE PROPS. E. & M. J., vol. 89, p. 1076. 1 column.

See also **USE OF CONCRETE IN MINES.**

STEEL SUPPORTS IN COAL MINES. By R. B. Woodworth. M. & M., vol. 31, p. 387. 7 columns. I.

See also **STRENGTH OF TIMBER, MASONRY, ETC., and COST OF SUPPORT.**

Strength of Timber, Masonry, Coal and Iron for Mine Support

THE STRENGTH OF MINE ROOFS. By R. D. N. Hall. M. & M., vol. 30, p. 474. 3 columns. I.

APPLICATION OF STEEL TO MINE TIMBERING. By R. B. Woodworth. Min. & Sci. Press, vol. 99, p. 462. 10 columns.

PILLARS IN TREADWELL MINES. Min. & Sci. Press, vol. 97, p. 85. ½ column. I.

SOME GERMAN MINE PROPS: Adjustable Forms. E. & M. J., vol. 88, p. 413. 5 columns. I.

ADJUSTABLE MINE SUPPORT. E. & M. J., vol. 86, p. 1260. ½ column. I.

PACKWALLS AND PIGSTIES FOR SUPPORT ON THE RAND. P. C. M. & M. Soc. S. A., vol. 10, p. 277. 2½ columns. I.

Subsidence in Mine Workings

DAMAGE TO SURFACE BUILDINGS CAUSED BY UNDERGROUND WORKINGS. By W. Hay. T. I. M. E., vol. 36, p. 427. 9 pages. I.

SCRANTON MINE CAVE INQUIRY. M. & M., vol. 31, p. 620. 2 columns.

CONTINUED TROUBLE OVER ANTHRACITE MINE CAVE-INS. E. & M. J., vol. 89, p. 580. 1 column.

THE PROTECTION OF THE SURFACE ABOVE ANTHRACITE MINES. E. & M. J., vol. 89, p. 167. 1½ columns.

SURFACE EFFECTS OF THE CAVING SYSTEM. By L. Eaton. Min. & Sci. Press, vol. 97, p. 428. 2½ columns.

SURFACE PROTECTION OVER COAL MINES. M. & M., vol. 30, p. 568. 3 columns.

CAVES IN THE JOPLIN LEAD AND ZINC REGION, MISSOURI. T. A. I. M. E., vol. 38, p. 331. 2 pages.

MINE SUBSIDENCE. By A. Richardson. P. C. M. & M. Soc. S. A., vol. 7, p. 279, 19 columns, I.; p. 325, 9 columns; p. 362, 10 column; vol. 8, p. 16, 3½ columns; p. 46, 10 columns.

SURFACE AND UNDERGROUND SUBSIDENCE IN COAL MINING. T. I. M. E., vol. 37, p. 691. ½ page.

UNWATERING OF STRATA AND SUBSIDENCES IN THE RENISH-WESTPHALIAN COAL FIELD. T. I. M. E., vol. 37, p. 691. 1 page.

SLIPS AND SUBSIDENCES. Earthwork and Its Cost, Chap. 18, p. 184.

SUBSIDENCE IN UNDERGROUND MINES. By A. Richardson. E. & M. J., vol. 84, p. 196. 10½ columns. I.

THE EFFECT PRODUCED UPON BEDS OF COAL BY WORKING AWAY THE OVER- OR UNDERLYING SEAMS. By G. Elliot. Min. Mag., vol. 9, p. 333. 4½ pages.

See also **PROTECTION IN MINING, and MINE SUPPORT: CONDITIONS AFFECTING.**

Size of Pillars, Barrier Pillars, Etc.

BARRIER PILLARS, "SENZIE" WALLS, WEMYSS COAL FIELDS, ENGLAND. T. I. M. E., vol. 36, p. 563. Note.

SIZE OF ROOMS AND PILLARS. E. & M. J., vol. 90, p. 871. Table.

SIZE OF PILLARS TO BE LEFT IN MINES. M. & M., vol. 29, p. 375. $\frac{1}{2}$ column.

STRENGTH OF PILLARS. P. C. M. & M. Soc. S. A., vol. 8, p. 49. $1\frac{1}{2}$ columns.

COLLAPSE OF SHAFT PILLARS. P. C. M. & M. Soc. S. A., vol. 10, p. 279. 1 column.

FAILURE OF MINE PILLARS. P. C. M. & M. Soc. S. A., vol. 8, p. 50. 1 column.

USE OF PILLARS IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 279. $\frac{1}{2}$ column. I.

See also **STRENGTH OF TIMBER, ETC.**

Methods of Timbering

ON TIMBERING MINES. Min. Mag., vol. 9, p. 330. $2\frac{1}{2}$ pages.

EXAMPLES OF MINE TIMBERING. By W. H. Vale. T. Au. I. M. E., vol. 8, pt. 2, p. 268. 8 pages. I.

TIMBERING AND ITS IMPORTANCE IN MAKING ESTIMATES OF COST. By R. James. T. Au. I. M. E., vol. 7, p. 84. 10 pages.

USE OF PROPS IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 278. 1 column. I.

TAPERED TIMBER PROPS. P. C. M. & M. Soc. S. A., vol. 9, p. 369. $1\frac{1}{2}$ columns.

TAPERED TIMBER. By P. Horan. T. I. M. E., vol. 37, p. 135. 12 pages. I.

REINFORCED TIMBER CAP. E. & M. J., vol. 86, p. 427. $\frac{1}{2}$ column. I.

COMBINATION OF STEEL AND WOOD MINE TIMBERS. E. & M. J., vol. 90, p. 1293. 1 column. I.

DRAWING TIMBERS IN THICK COAL SEAM WORKING. E. & M. J., vol. 86, p. 15. 2 columns.

MINE TIMBERING IN FRANCE. E. & M. J., vol. 88, p. 1172. 1 column. I.

SADDLE-BACK STULLS. Min. & Sci. Press, vol. 96, p. 782. $\frac{1}{2}$ column. I.

"SADDLE-BACK" TIMBERING IN AUSTRALIAN MINES. T. I. M. & M., vol. 18, p. 293. 1 page. I.

See also **TUNNEL SUPPORT.**

STOPE TIMBERING. M. & M., vol. 31, p. 29. $\frac{1}{2}$ column.

STULL-SETS FOR WIDE LODES. T. I. M. & M., vol. 18, p. 308. 2 pages. I.

NOTES ON PLACING AND CUTTING STULLS. E. & M. J., vol. 88, p. 572. 2 columns. I.

TIMBERING WIDE STOPES. E. & M. J., vol. 88, p. 376. 1 column. I.

METHODS OF TIMBERING IN STOPES, THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 638. 1 column. I.

See also **METHODS OF STOPING.**

RETIMBERING OF THE KEARSARGE SHAFT. By L. Fraser. Min. & Sci. Press, vol. 95, p. 432. $2\frac{1}{2}$ columns. I.

A METHOD FOR SETTING TIMBER IN INCLINED SHAFTS. By C. W. McDougall. E. & M. J., vol. 87, p. 656. $2\frac{1}{2}$ columns. I.

See also **SHAFT LINING.**

TIMBERING IN THE JOPLIN DISTRICT. By L. L. Wittich. M. & M., vol. 31, p. 144. 4 columns. I.

METHOD OF TIMBERING IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 297. 1 column. I.

A METHOD OF TIMBERING AT THE MOUNT REX TIN MINE, BEN LOMOND, TASMANIA. By Mark Ireland. T. Au. I. M. E., vol. 10, p. 261. 1 page.

METHODS OF TIMBERING EMPLOYED AT THE BROKEN HILL MINES, NEW SOUTH WALES. E. & M. J., vol. 86, p. 799. 1 column. I.

METHOD OF TIMBERING IN THE CARMAUX COAL MINES OF FRANCE. E. & M. J., vol. 86, p. 577. 2 columns. I.

MASONRY AND TIMBERING IN BELGIAN MINES. E. & M. J., vol. 88, p. 1172. Note. I.

TIMBERING WORKING PLACES IN THE PITCHING SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 27. 1 column. I.

TIMBERING IN INDIAN COAL MINES. M. & M., vol. 31, p. 179. $\frac{1}{2}$ column. I.

TIMBERING ROOMS IN GERMANY. E. & M. J., vol. 88, p. 1172. $\frac{1}{2}$ column. I.

FOREPOLING IN THE ANTHRACITE MINES. E. & M. J., vol. 86, p. 477. 1 column.

FOREPOLING IN HEAVY GROUND. E. & M. J., vol. 88, p. 375. 2 columns. I.

FALSE SET FOR SPILING GROUND. By J. Humes. E. & M. J., vol. 89, p. 698. $3\frac{1}{2}$ columns. I.

See also **SHAFT SINKING, and METHODS OF TUNNELING.**

CORNISH METHODS OF MINING: Timbering. By G. P. Chaplin. T. F. I. M. E., vol. 13, p. 200. 10 pages. I.

See also **USE OF CONCRETE IN MINES, and COST OF SUPPORT.**

Tunnel Support

METHOD OF TIMBERING EMPLOYED IN THE HOSMER MINES, TUNNEL. J. C. M. I., vol. 13, pp. 238 and 239. I.

TIMBERING OF DRIFTS IN THE ESPERANZA MINE, EL ORO, MEXICO. Min. & Sci. Press, vol. 99, p. 822. $1\frac{1}{2}$ columns. I.

DRIFT TIMBERING FOR HEAVY GROUND. E. & M. J., vol. 89, p. 1101. 1 column. I.

EUROPEAN METHODS OF ENTRY TIMBERING. By H. M. Payne. E. & M. J., vol. 88, p. 1172. $2\frac{1}{2}$ columns. I.

TIMBERING A SLOPE: Anthracite Mines of Pennsylvania. Coal Mining Supplement, E. & M. J., vol. 88, p. 25. 2 columns. I.

LINING THE LOS ANGELES TUNNEL WITH CONCRETE. Min. & Sci. Press, vol. 100, p. 682. 1 column.

THE USE OF STEEL SUPPORTS IN COAL MINES. By R. B. Woodworth. E. & M. J., vol. 85, p. 602. 7 columns. I.

SPECIAL FORMS OF STEEL FOR MINE SUPPORT. P. E. Soc. W. Pa., vol. 24, p. 40. 50 pages. I.

STEEL SUPPORTS FOR MINE DRIFTS. By R. B. Woodworth. E. & M. J., vol. 85, p. 1196. 3 columns. I.

INTERLOCKING STEEL MINE SUPPORTS: Particularly Mine Sets for Entries. M. & M., vol. 31, p. 664. $1\frac{1}{2}$ columns. I.

See also **USE OF CONCRETE IN MINES, and KINDS OF SUPPORT, TIMBER, ETC.**

See also **COST OF MINE AND MILL CONSTRUCTION.**

Shaft Lining: Timbering, Tubbing, Cementation, Etc.

METHODS OF SHAFT TIMBERING AT THE SUPERIOR AND BOSTON MINE, ARIZONA. M. & M., vol. 31, p. 114. 1 column. I.

TIMBERING OF A SIX-COMPARTMENT SHAFT. T. A. I. M. E., vol. 41, pp. 537, 538 and 539. I.

SHAFT TIMBERING: The Giroux Shaft, Kimberly, Nevada. E. & M. J., vol. 89, p. 1325. 5 columns. I.

TIMBERING IN THE CLONAN SHAFT, MINEVILLE, NEW YORK. E. & M. J., vol. 85, p. 111. 1 column. I.

METHOD OF TIMBERING THE ALLAN SHAFTS NEAR STELLARTON, NOVA SCOTIA. J. M. Soc. N. S., vol. 12, p. 17. 1 page. I.

COLLAR AT NO. 1 ALLAN SHAFT, STELLARTON, NOVA SCOTIA. By H. E. Coll. J. M. Soc. N. S., vol. 13, p. 69. 6 pages.

SETTING OUT INCLINED SHAFT TIMBERS. By D. J. Browne. J. C. M. I., vol. 13, p. 455. 9 pages. I.

LINING-UP TIMBERS IN INCLINED SHAFTS. By B. J. Case. E. & M. J., vol. 86, p. 612. 3½ columns. I.

RECLAIMING THE INCLINED HOISTWAY AT MINE 21, MINEVILLE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 87, p. 600. 5 columns. I.

STEEL SHAFT SETS ON THE MESABI RANGE. By F. A. Kennedy. E. & M. J., vol. 89, p. 206. 1 column. I.

STEEL FORMS FOR SHAFT LINING. Min. & Sci. Press, vol. 100, p. 529. ½ column.

SHAFT TIMBERING BRAKPAN, TRANSVAAL, SOUTH AFRICA. By E. M. Weston. E. & M. J., vol. 85, p. 551. 5 columns. I.

UNDERGROUND STEEL CONSTRUCTIONS: Particularly Mine Shafts. By R. B. Woodworth. T. L. S. M. I., vol. 15, p. 45. 55 pages. I.

STEEL MINE SHAFT CONSTRUCTION. By R. B. Woodworth. M. & M., vol. 31, p. 516. 10½ columns. I.

AN IMPROVED SWINGING STAGE: Shaft Lining Device. E. & M. J., vol. 86, p. 217. 1 column. I.

GUIDING A DROP-SHAFT. E. & M. J., vol. 90, p. 498. 2 columns. I.

See also **SHAFT SINKING.**

AN ACCOUNT OF THE METHOD EMPLOYED IN STOPPING AN EXTENSIVE LEAK, UNDER HIGH PRESSURE, IN THE TUBBING OF THE EAST PIT, MURTON COLLIERY, 1907. By W. O. Wood. T. I. M. E., vol. 38, p. 568. 8½ pages. I.

REPAIRING A CAST-IRON SHAFT LINING. E. & M. J., vol. 88, p. 1185. 1½ columns. I.

See also **USE OF CONCRETE IN MINES, and KINDS OF SUPPORT, TIMBER, ETC.**

See also **COST OF MINE AND MILL CONSTRUCTION, COST OF SHAFT SINKING, and COST OF SUPPORT.**

Square-Set Timbering

THE PORTLAND SQUARE-SET SYSTEM. E. & M. J., vol. 85, p. 102. 3 columns. I.

LEANING STOPE SETS. E. & M. J., vol. 90, p. 8. 1½ columns. I.

PLACING SILLS BENEATH SQUARE-SETS ALREADY IN PLACE. E. & M. J., vol. 90, p. 501. 2½ columns. I.

SQUARE-SETTING IN THE CLIFTON-MORENCI MINES. Min. & Sci. Press, vol. 101, p. 832. 2½ columns. I.

SQUARE-SET MINING OR A MODIFICATION OF IT. By C. T. Rice. Min. & Sci. Press, vol. 95, p. 365. 5 columns. I.

SQUARE-SET MINING IN THE TAMARACK MINES. Min. & Sci. Press, vol. 96, p. 848. Note.

SQUARE-SET MINING AT CANANEA. E. & M. J., vol. 90, p. 915. 1 column.

SQUARE-SET TIMBERING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 749. 1 column. I.

TIMBERING IN THE TINTIC DISTRICT, UTAH: Square-Sets. M. & M., vol. 31, p. 555. 1 column. I.

SQUARE-SETS AT BISBEE, ARIZONA. Min. & Sci. Press, vol. 99, p. 360. ½ column.

THE CANANEA METHOD OF FRAMING SQUARE-SETS. E. & M. J., vol. 90, p. 916. ½ column. I.

SQUARE-SETS USED IN THE ESPERANZA MINE, MEXICO. Min. & Sci. Press, vol. 99, p. 847. ½ column.

SQUARE-SETS IN THE CENTER STAR MINES, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 18. 1½ columns. I.

METHOD OF SQUARE-SET STOPING AT BISBEE. By M. J. Elsing. E. & M. J., vol. 89, p. 707. 7 columns. I.

See also METHODS OF STOPING.

See also METHODS OF MINING: GENERAL AND MISCELLANEOUS and COST OF SUPPORT.

Preservation of Mine Timber and Structural Steel

WOOD PRESERVATION FROM AN ENGINEERING STANDPOINT. By C. T. Barnum. J. W. Soc. E., vol. 15, p. 346. 20 pages. I.

THE EFFECT OF MOISTURE ON WOOD. P. C. M. & M. Soc. S. A., vol. 7, p. 353. 2 columns.

OPEN-TANK METHOD OF PRESERVING TIMBER. By H. F. Weiss. E. & M. J., vol. 87, p. 840. 3½ columns.

CREOSOTE AS A TIMBER PRESERVATIVE. E. & M. J., vol. 90, p. 1295. 2 columns.

WOOD PRESERVATION WITH SPECIAL REFERENCE TO MINE TIMBERS. By J. M. Nelson. T. L. S. M. I., vol. 14, p. 99. 18 pages. I.

PROLONGING THE LIFE OF MINE TIMBERS. By J. W. Nelson. Min. & Sci. Press, vol. 95, p. 816. 6 columns. I.

PRESERVATION OF MINE TIMBERS. M. & M., vol. 29, p. 342. ¼ column.

PROLONGING THE LIFE OF MINE TIMBERS. By J. M. Nelson. M. & M., vol. 29, p. 137. 9 columns.

PRESERVATION OF MINE TIMBERS. By C. A. Chase. E. & M. J., vol. 89, p. 453. ¼ column.

PRESERVATION OF TIMBER. By F. H. Mason. Min. & Sci. Press, vol. 97, p. 837. 9½ columns. I.

THE PRESERVATION OF MINE TIMBERS. By J. M. Nelson. E. & M. J., vol. 88, p. 211. 4 columns. I.

PRESERVATION OF MINE TIMBERS FROM DECAY. P. C. M. & M. Soc. S. A., vol. 8, p. 28. 1½ columns.

THE PRESERVATIVE TREATMENT OF WOODS. P. C. M. & M. Soc. S. A., vol. 5, p. 68. ¼ column.

COAL TAR AND ITS PRODUCTS AS PRESERVATIVES FOR WOOD. Min. & Sci. Press, vol. 20, p. 10. 2 columns.

THE PROTECTION OF MINE TIMBERS FROM FUNGUS. By J. Macoun. J. C. M. I., vol. 13, p. 467. 3 pages.

THE PRESERVATION OF STRUCTURAL TIMBERS FROM DECAY. By C. P. Winslow. P. E. Soc. W. Pa., vol. 26, p. 427. 58 pages. I.

See also KINDS OF SUPPORT, TIMBER, ETC.

PROTECTIVE COATINGS FOR STRUCTURAL MATERIALS. By R. S. Perry. J. W. Soc. E., vol. 14, p. 399. 19 pages.

RUSTING OF IRON. By F. H. Mason. Min. & Sci. Press, vol. 97, p. 329. 2½ columns.

RUST PREVENTIVE. Min. & Sci. Press, vol. 95, p. 593. ¼ column.

PREVENTION OF RUSTING. Min. & Sci. Press, vol. 96, p. 704. ¼ column.

RELATIVE CORROSION OF STEEL AND WROUGHT IRON TUBING. By H. M. Howe and B. Stoughton. E. & M. J., vol. 86, p. 563. 4½ columns.

CORROSION OF STEEL AND IRON TUBING. E. & M. J., vol. 86, p. 821. 3 columns.

CORROSION OF IRON AND STEEL. By A. Sang. P. E. Soc. W. Pa., vol. 24, p. 493. 68 pages. I.

COST OF OPEN-TANK PLANTS FOR PRESERVING TIMBER. E. & M. J., vol. 87, p. 840. 1 column.

See also COST OF PRESERVATION OF MINE TIMBER and COST OF MINE SUPPORT

PHOTOGRAPHY FOR MINES AND TECHNICAL WORK

PHOTOGRAPHY IN MINING. By T. R. Archbald. Min. & Sci. Press, vol. 99, p. 431. 1½ columns. I.

THE PANORAMIC CAMERA APPLIED TO PHOTO-TOPOGRAPHY. By C. W. Wright. T. A. I. M. E., vol. 38, p. 482. 15½ pages. I.

PHOTOGRAPHY IN MINING. By J. B. Lanfield. Min. & Sci. Press, vol. 98, p. 894. 2 columns.

MODERN PRACTISE IN COLOR PHOTOGRAPHY. By A. N. Goldsmith. Sch. Mines Quart., vol. 30, p. 130. 8 pages.

POWER: STEAM, WATER, ELECTRICITY AND GAS

General Application of Power

POWER IN ITS RELATION TO THE INDUSTRIES. By C. E. Lucke. Sch. Mines Quart., vol. 31, p. 246. 21 pages. I.

POWER PLANT ECONOMICS AS APPLIED TO MINING. By H. Jalowick. E. & M. J., vol. 88, p. 1067. 3½ columns. I.

ECONOMY OF POWER IN CRUSHING ORE. By E. A. Hersam. Min. & Sci. Press, vol. 95, p. 621. 12 columns.

See also the **REDUCTION OF ORES, ETC.**

POWER REQUIRED FOR STAMP BATTERIES. E. & M. J., vol. 89, p. 258. 1 column. D.

See also **STAMP MILL PRACTICE.**

POWER FOR CONCENTRATING MILL. By F. C. Bowman. M. & M., vol. 31, p. 19. 1½ columns. Tables.

See also **CONCENTRATION.**

POWER REQUIRED FOR CONCENTRATING MACHINES. Min. & Sci. Press, vol. 101, p. 304. Table.

POWER USED IN MINING. By E. O'Toole. M. & M., vol. 31, p. 86. 5½ columns. I.

POWER PRODUCTION AT COLLIERIES. M. & M., vol. 31, p. 33, 1½ columns; p. 180, 4 columns, I.

POWER SYSTEMS OF THE MINES OF THE JOPLIN DISTRICT. By D. F. Boardman. E. & M. J., vol. 86, p. 327. 7½ columns.

See also **ELECTRICITY IN THE MINE, and GAS FOR POWER.**

EXHAUST-STEAM TURBINES AT LANCASHIRE COLLIERIES. By G. H. J. Hooghwinkel. T. I. M. E., vol. 37, p. 176. 12 pages.

THE RECOVERY OF POWER FROM EXHAUST STEAM. By W. M. Sanderson. T. I. M. E., vol. 38, p. 282. 27 pages. I.

RELATION OF LOAD FACTOR TO POWER COSTS. By E. W. Lloyd, C. A. S. Howlett and J. M. S. Waring. J. W. Soc. E., vol. 14, p. 241. 21½ pages. D.

See also **COST OF POWER.**

THE LAW OF CONSERVATION OF ENERGY. By C. P. Steinmetz. J. W. Soc. E., vol. 15, p. 80. 12 pages. I.

ANALYSIS OF PROPOSED CHANGE IN POWER CONTRACT. By R. Sibley. E. & M. J., vol. 87, p. 794. 7 columns. D.

ELECTRIC DRIVE IN FOUNDRIES AND WORKS. By H. A. Carter. Min. & Sci. Press, vol. 100, p. 215. 7 columns.

See also **POWER TRANSMISSION, ETC.**

See also **FINE CRUSHING BY MILLS.**

Steam Boilers and Power Plants

STEAM BOILERS: A Few Hints as to Proper Management. By E. P. Lee. T. A. I. M. E., vol. 8, pt. 1, p. 97. 6 pages.

METHODS OF STUDYING THE HEAT-ABSORBING PROPERTIES OF STEAM BOILERS. By L. R. Stowe. J. W. Soc. E., vol. 13, p. 715. 31½ pages. D.

SOME RESULTS DUE TO IMPROVEMENT IN BOILER AND FURNACE DESIGN. By A. Bement. J. W. Soc. E., vol. 13, p. 209. 74 pages. I.

THE NATURE OF TRUE BOILER EFFICIENCY. By W. T. Ray and H. Kreisinger. J. W. Soc. E., vol. 12, p. 661. 40 pages. I.

A NEW TYPE OF WATER TUBE BOILER. By T. H. McGraw, Jr. P. E. Soc. W. Pa., vol. 25, p. 491. 13 pages. I.

THE CARE OF SMALL STEAM BOILERS. By W. O. Rogers. E. & M. J., vol. 88, p. 1217. 7½ columns. I.

SIGNIFICANCE OF DRAFTS IN STEAM-BOILER PRACTICE. By W. T. Ray and H. Kreisinger. U. S. G. S., Bull. 367. 61 pages. 1909.

CONDENSATION IN STEAM PIPES. E. & M. J., vol. 88, p. 512. 1 column. D.

A REVIEW OF THE UNITED STATES GEOLOGICAL SURVEY FUEL TESTS UNDER STEAM BOILERS. By L. P. Breckenridge. J. W. Soc. E., vol. 12, p. 285. 64 pages. I.

THE BURNING OF COAL WITHOUT SMOKE IN BOILER PLANTS. By D. T. Randall. U. S. G. S., Bull. 334. 26 pages. 1908.

USE OF LOW-GRADE FUEL UNDER BOILERS. By J. Preston. J. M. Soc. N. S., vol. 15, p. 103. 5 pages.

See also **TESTING FUELS AND THEIR VALUE**, and **COST OF POWER**.

Steam Engine Calculations, Tests and Horse-Power

See also first volume of INDEX.

Gas and Oil Engines

GAS ENGINES FOR MINING PURPOSES. By A. S. Atkinson. Min. & Sci. Press, vol. 99, p. 300. 3½ columns.

THE LARGEST COKE OVEN GAS ENGINE PLANT. By J. B. Van Brussel. E. & M. J., vol. 87, p. 1189. 5 columns. I.

GAS ENGINES: Steel Plant Practice. By M. B. Lamb. Min. & Sci. Press, vol. 99, p. 459. 5 columns. I.

GAS AND GASOLINE ENGINES AS APPLIED TO SMALL WATER WORKS PLANTS. By C. O. Rogers. P. E. Soc. W. Pa., vol. 14, p. 85. 16 pages. I.

CARBURETORS FOR GAS ENGINES AT MINES. By E. N. Percy. Min. & Sci. Press, vol. 99, p. 687. 2 columns.

See also first volume of **INDEX** and **COST OF POWER**.

Horse Power Tests and Calculations of Boilers

EVAPORATIVE TESTS OF STEAM BOILERS. By W. Kent. P. E. Soc. W. Pa., vol. 2, p. 221. 24 columns.

See also first column of **INDEX**.

Superheated and Wet Steam

SUPERHEATED STEAM FOR WINDING ENGINES. E. & M. J., vol. 87, p. 467. 2½ columns.

See also first volume of **INDEX**.

Boiler Feedwater

BOILER FEEDWATER AND ITS TREATMENT. By J. R. Campbell. M. & M., vol. 29, p. 297. 4½ columns. I.

THE SELECTION OF A BOILER FEEDWATER. By J. C. W. Greth. P. E. Soc. W. Pa., vol. 26, p. 121. 38 pages. D.

TREATMENT OF BOILER WATER. By A. L. McCallum. J. M. Soc. N. S., vol. 15, p. 79. 3 pages.

WATER SOFTENERS FOR BOILER FEEDWATER. M. & M., vol. 29, p. 298. ½ column.

COOLING TOWERS FOR HOT WATER. By S. K. Patteson. Min. & Sci. Press, vol. 98, p. 668. 1½ columns.

398 POWER: STEAM, WATER, ELECTRICITY AND GAS

CAPACITY OF BOILER FEED-PUMPS.
By W. B. Osborn. M. & M., vol. 30,
p. 144. 1½ columns.

Condensers for Steam

**THE SURFACE CONDENSER IN MINING
POWER PLANTS.** By W. A. Mac-
leod. T. I. M. & M., vol. 19, p. 332.
66 pages. I.

**THE SURFACE CONDENSER IN MINE
POWER PLANTS.** By W. A. Mac-
leod. E. & M. J., vol. 90, p. 124.
8½ columns.

See also first volume of INDEX.

Feedwater Heaters for Boilers

THE ORGAN FEEDWATER HEATER.
M. & M., vol. 31, p. 371. 2½ col-
umns. I.

See also first volume of INDEX.

Mechanical Feeders for Steam Boilers

**MECHANICAL STOKERS AND HAND FIR-
ING.** M. & M., vol. 31, p. 42. 3 col-
umns. Tables.

See also first volume of INDEX and
COST OF POWER.

The Central Power Plant

CENTRAL STATION DESIGN. By A. A.
Radtke. P. Soc. P. E. E., vol. 15,
p. 156. 12 pages.

**A CENTRAL POWER PLANT FOR AN-
THRACITE MINES.** E. & M. J., vol.
86, p. 817. 1½ columns.

CENTRAL STATION ECONOMIES. By
W. L. Abbott. J. W. Soc. E., vol.
15, p. 41. 16 pages. I.

**POWER-STATION OF THE DE BEERS
CONSOLIDATED MINES, LTD., KIM-
BERLEY, SOUTH AFRICA.** By P. A.
Robbins. T. A. I. M. E., vol. 39,
p. 177. 33½ pages. I.

**WINDBER POWER PLANTS, PENNSYL-
VANIA.** M. & M., vol. 30, p. 457.
6 columns. I.

GREAT FALLS, MONTANA. M. & M.,
vol. 29, p. 350. 3½ columns. I.

Steam Pipes and Coverings

STEAM PIPE COVERING IN A WET SHAFT.
By E. P. Kennedy. Min. & Sci.
Press, vol. 97, p. 89. ½ column.

**SUPPORTING ROLLER FOR OUTDOOR
STEAM LINE.** E. & M. J., vol. 89,
p. 1215. ½ column. I.

See also first volume of INDEX.

Scale and Boiler Compounds

See first volume of INDEX.

Consumption and Waste of Coal and Steam

COMBUSTION OF COAL IN BOILERS.
M. & M., vol. 31, p. 492. 1½ col-
umns.

STEAM WASTE AT MINES. M. & M.,
vol. 30, p. 315. 1½ columns.

Valves and Valve-Gear for Steam Engines

See first volume of INDEX.

Water Power Plants: Theory and Practice

HYDRO-ELECTRIC POWER FORMULAE.
By J. H. Wise. Min. & Sci. Press,
vol. 101, p. 84. ½ column.

**WATER AS A MOTIVE POWER UNDER
GROUND.** E. & M. J., vol. 86,
p. 1211. 1½ columns. I.

**USING MINE WATER AS MOTIVE
POWER.** By D. T. Pierce. E. &
M. J., vol. 88, p. 5. 1½ columns. I.

See also WATER WHEELS, ETC., and
first volume of INDEX.

Water Wheels, Governors, Data, Etc.

**THE EFFECTIVE HORSE-POWER OF AN
HYDRAULIC TURBINE.** Min. & Sci.
Press, vol. 98, p. 450. ½ column.

HYDRAULIC DIAGRAMS. By S. D.
Bleich. Sch. Mines Quart., vol. 30,
p. 33. 7 pages. D.

A WATER WHEEL GOVERNOR AND ITS OPERATION. By D. B. Ripogle. Min. & Sci. Press, vol. 97, p. 331. 3½ columns. I.

SPEED REGULATION OF HIGH-HEAD WATER WHEELS. By H. S. Knowlton. E. & M. J., vol. 85, p. 362. 4½ columns.

See also **WATER POWER PLANTS, ETC.**, and first volume of **INDEX**.

The Electric Power Plant and Its Equipment

THE REGULATION OF COLLIERY ELECTRICAL POWER STATION SUPPLY, WITH SPECIAL REFERENCE TO THE TERRILL REGULATOR. By E. Gar-
ton. T. I. M. E., vol. 37, p. 61. 20 pages. I. D.

THE UTILIZATION OF ANTHRACITE COAL FOR THE GENERATION OF ELECTRICITY. By J. Clark. E. & M. J., vol. 88, p. 1175. 1½ columns.

THE ELECTRICAL EQUIPMENT OF GOLD MINES. By H. J. S. Heather. T. I. M. & M., vol. 17, p. 378, 48 pages, I.; p. 444, 19 pages, I.; p. 528, 3½ pages.

HYDRO-ELECTRIC POWER PLANTS IN CANADA. T. I. M. & M., vol. 18, p. 191. 4 pages.

See also **WATER POWER PLANTS**.

A STORAGE BATTERY EXTENSION TO A THREE-PHASE COLLIERY POWER-PLANT. By W. Maurice. T. I. M. E., vol. 39, p. 601. 17 pages. I.

THREE-WIRE MINE SERVICE. By J. M. Hunt. M. & M., vol. 31, p. 402. 4½ columns. I.

DIRECT CURRENT MOTORS. By W. B. Clarke. M. & M., vol. 29, p. 88, 7 columns, I.; p. 112, 4 columns, I.

ELECTRIC POWER FOR CEMENT PLANTS. By J. B. Porter. E. & M. J., vol. 86, p. 80. 1½ columns.

HEATING OF CONDUCTORS BY ELECTRIC CURRENTS. By S. F. Walker. E. & M. J., vol. 86, p. 177. 2 columns.

NOVEL AUTOMATIC SWITCH. By C. S. Beach. M. & M., vol. 30, p. 566. 2½ columns. I.

A USEFUL BANK OF LAMPS. By L. E. Brown. E. & M. J., vol. 89, p. 859. 2 columns. I.

EXPLOSIONS IN SWITCH BOXES. By S. F. Walker. E. & M. J., vol. 88, p. 166. 1½ columns.

See also **CAUSE OF ACCIDENTS, ELECTRICITY IN THE MINES, THE ELECTRIC POWER PLANT, ETC.**, and **COST OF POWER**.

Electricity in the Mine

THE ABC OF ELECTRICITY IN MINES. M. & M., vol. 31, p. 692. 2 columns.

ELECTRICITY IN MINING. By W. C. Wagner. M. & M., vol. 31, p. 756. 6 columns. I.

MODERN APPLICATIONS OF ELECTRICITY TO MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 95. 1½ columns.

SAFE USE OF ELECTRICITY IN MINES. By G. R. Wood. M. & M., vol. 30, p. 33. 5 columns.

APPLICATION OF ELECTRICITY IN MINES. By G. Harrison. M. & M., vol. 30, p. 164. 2½ columns.

ELECTRICITY IN MINES. By T. J. McKavanagh. J. M. Soc. N. S., vol. 13, p. 75. 8 pages.

REGULATING THE USE OF ELECTRICITY IN MINES. M. & M., vol. 29, p. 329. 12½ columns.

See also **MINE REGULATIONS**.

REMARKS ON SPECIAL RULES FOR THE INSTALLATION AND USE OF ELECTRICITY IN MINES. By E. E. Baker. T. I. M. E., vol. 39, p. 328. 20 pages.

ELECTRICAL WIRING FOR DEEP MINING WORK. By C. L. C. Fichtel. E. & M. J., vol. 88, p. 516. 5½ columns. I.

ELECTRICAL WIRING FOR DEEP MINING WORK. E. & M. J., vol. 88, p. 837. 2 columns.

400 POWER: STEAM, WATER, ELECTRICITY AND GAS

- TROLLEY WIRE SUPPORT FOR MINES.** M. & M., vol. 31, p. 32. 1½ columns. I.
- ELECTRICAL EQUIPMENT OF THE BUTTE BALAKLAVA MINE.** By A. F. Bushnell. E. & M. J., vol. 86, p. 714. 2½ columns. I.
- THE USES OF ELECTRICITY IN MINING WITH SPECIAL REFERENCE TO THE ELECTRICAL OPERATIONS AT MOUNT MORGAN.** By E. H. Hewlett. T. Au. I. M. E., vol. 6, p. 226. 21 pages. D.
- THE ELECTRICAL EQUIPMENT OF GOLD MINES.** By H. J. S. Heather. T. I. M. & M., vol. 17, p. 378, 48 pages, I.; p. 444, 19 pages, I.; p. 528, 3½ pages.
- ELECTRIC POWER AT THE CLAUSTHAL MINES.** By A. Gradenwitz. E. & M. J., vol. 85, p. 1129. 10½ columns.
- ELECTRICAL POWER AT MEXICAN MINES AND MILLS.** By C. V. Allen. E. & M. J., vol. 88, p. 690. 7 columns. I.
- ELECTRICITY IN COAL MINES.** By R. Nelson. T. I. M. E., vol. 37, p. 459, 55 pages, I.; p. 514, 22½ pages.
- ELECTRICITY IN MODERN COAL MINING.** By H. J. Nelms. E. & M. J., vol. 86, p. 1106. 2½ columns.
- ELECTRICAL POWER GENERATION AND DISTRIBUTION AT THE COLLIERIES OF THE LOCHGELLY IRON AND COAL COMPANY, LIMITED, FIFE.** By J. Paul. T. I. M. E., vol. 37, p. 364. 19 pages. I.
- DEVELOPMENT OF ELECTRIC POWER IN COAL MINES.** By G. E. Walsh. E. & M. J., vol. 86, p. 1011. 4½ columns.
- EARTHED AND INSULATED NEUTRALS IN COLLIERY WORK.** E. & M. J., vol. 90, p. 275. 4 columns. I.
- ELECTRICITY IN THE COAL MINING INDUSTRY.** P. C. M. & M. Soc. S. A., vol. 10, p. 334. 3 columns.
- COAL MINE EQUIPMENT.** By W. S. Meyers. M. & M., vol. 30, p. 731. 4 columns.
- ELECTRICITY AND COAL MINING.** By F. C. Albright. M. & M., vol. 30, p. 342. 7½ columns.
- ELECTRICITY IN COAL MINES.** By W. M. Thornton. E. & M. J., vol. 89, p. 1238. 3 columns.
- THE INSTALLATION OF ELECTRIC POWER IN COAL MINES.** By W. A. Thomas. E. & M. J., vol. 87, p. 510. 1½ columns. I.
- THE USE OF ELECTRICITY AS APPLIED TO COAL MINING.** By W. B. Spellmire. E. & M. J., vol. 87, p. 507. 4½ columns. I.
- IS THE ELECTRIC CURRENT SAFE IN COAL MINES?** By R. N. Hosler. E. & M. J., vol. 86, p. 29. 7 columns.
- THE SAFE USE OF ELECTRICITY IN COAL MINING.** By S. F. Walker. E. & M. J., vol. 88, p. 877. 4 columns.
- See also **CAUSES OF ACCIDENTS AND PROTECTION IN MINING.**
- THE ELECTRICAL AND COAL MINING INDUSTRIES.** By F. C. Albrecht. E. & M. J., vol. 88, p. 163. 5 columns.
- ELECTRICITY IN ANTHRACITE MINING.** By H. M. Warren. Coal Mining Supplement, E. & M. J., vol. 88, p. 19. 3½ columns.
- ELECTRICITY IN WEST VIRGINIA MINES.** By R. N. Williams. E. & M. J., vol. 90, p. 28. 12 columns. I.
- USE OF ELECTRICITY IN AUSTRALIAN COLLIERIES.** By A. S. Brown. E. & M. J., vol. 86, p. 966. 4 columns.
- ELECTRICAL COLLIERY INSTALLATIONS IN SCOTLAND.** By J. B. Van Brussell. E. & M. J., vol. 89, p. 782. 8½ columns. I.
- ELECTRICITY AT THE SHAMROCK I AND II COLLIERY, HERNE, WESTPHALIA, GERMANY.** By H. M. Hudspeeth. T. I. M. E., vol. 39, p. 249. 17 pages. I.

THE USE OF ELECTRICITY IN THE BRITISH COLUMBIA COAL MINES. E. & M. J., vol. 89, p. 1074. 5½ columns.

THE ELECTRIFICATION OF MURTON COLLIERY, COUNTY DURHAM. By E. S. Wood. T. I. M. E., vol. 39, p. 226. 22 pages. I.

EXPERIMENTS WITH TWO ELECTRICALLY DRIVEN PUMPS. By T. L. Galloway. T. I. M. E., vol. 36, p. 82. 11 pages.

See also **ROTARY PUMPS and ELECTRICALLY DRIVEN PUMPS.**

See also **ELECTRIC HOISTING and ELECTRIC HAULAGE.**

See also **COST OF FUEL.**

Power Transmission: Electricity, Steam, Water and Miscellaneous

THE DEVELOPMENT AND OPERATION OF A LARGE ELECTRIC TRANSMISSION AND CONVERSION SYSTEM. By E. F. Smith. J. W. Soc. E., vol. 12, p. 409. 29 pages. I.

See also **ELECTRICITY IN THE MINE,** and first volume of **INDEX,** also **COST OF POWER.**

REDUCTION

The Reduction of Ores: Methods and Practice

ORE CRUSHING. P. C. M. & M. Soc. S. A., vol. 9, p. 62. ¼ column.

CRUSHING ORE. By M. P. Bass. Min. & Sci. Press, vol. 96, p. 354. 13 columns. I.

THE MECHANICS OF ORE CRUSHING. By C. De Kalb. Min. & Sci. Press, vol. 96, p. 155. 2½ columns. I.

CRUSHING BY STAGES. By A. Del Mar. Min. & Sci. Press, vol. 101, p. 614. 2½ columns.

STAGE CRUSHING. By H. W. Harding. E. & M. J., vol. 89, p. 221. 3 columns.

NOVEL HAND CRUSHING DEVICE. By H. L. Jene. E. & M. J., vol. 87, p. 788. 1½ columns. I.

BREAKING ORE BY TRIP HAMMER, EL COBRE, CUBA. M. & M., vol. 31, p. 451. I.

ECONOMY OF POWER IN CRUSHING ORE. By E. A. Hersam. Min. & Sci. Press, vol. 95, p. 621. 12 columns.

THE CALCULATION OF THE COMPARATIVE EFFICIENCIES OF CRUSHING AND GRINDING MACHINES. By R. W. Chapman. T. Au. I. M. E., vol. 13, p. 154. 4 pages. I.

ON TESTING REDUCING MACHINERY. By F. D. Power. T. Au. I. M. E., vol. 2, p. 81. 3½ pages.

SOME NOTES ON DRY CRUSHING. By N. F. White. T. Au. I. M. E., vol. 6, p. 37. 24 pages. I.

THE RISE AND FALL OF DRY CRUSHING ON THE HAURAKI GOLDFIELD. By P. Morgan. T. Au. I. M. E., vol. 9, p. 161. 15 pages.

PRACTICAL NOTES ON DRY CRUSHING MILLS IN WESTERN AUSTRALIA. P. C. M. & M. Soc. S. A., vol. 10, p. 222. 5 columns.

DRY CRUSHING AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1277. 1 column.

See also **FINE CRUSHING BY MILLS.**

WESTRALIAN WET CRUSHING PLANTS, WITH SOME NOTES ON LABOUR EFFICIENCY. By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 8, p. 232, 14½ columns; p. 277, 1½ columns; p. 345, 1½ columns; p. 383, 1½ columns; vol. 9, p. 24, 1 column; p. 270, 4 columns.

REDUCTION OF ORES IN THE BARBERTON GOLDFIELD, SOUTH AFRICA. P. C. M. & M. Soc. S. A., vol. 10, p. 130. 2 columns.

NATOMAS 1500-TON PLANT FOR CRUSHING DREDGE TAILING. By G. Bowers. Min. & Sci. Press, vol. 99, p. 609. 8½ columns. I.

See also **DISPOSAL OF WASTE.**

"BATTLE-BOX" FOR CLEANING FINE BARITE. T. A. I. M. E., vol. 40, pp. 731 and 732. I.

See also **COST OF REDUCTION.**

Automatic Feeders for Reducing Machinery

NOTES ON FEEDERS WITH A DESCRIPTION OF A NEW DRIVING DEVICE. By D. J. Pepler. P. C. M. & M. Soc. S. A., vol. 8, p. 42, 3 columns, I.; p. 85, 1½ columns; p. 146, 3½ columns, I.; p. 182, 2½ columns.

THE HUNTER ORE FEEDER. P. C. M. & M. Soc. S. A., vol. 5, p. 9. 1½ columns. I.

AN IMPROVED BUFFER FOR ORE FEEDERS: Stamp Milling. By T. White. T. Au. I. M. E., vol. 5, p. 118. 1½ pages. I.

See also first volume of **INDEX.**

Crushers: Construction and Operation

COMPARISON OF GYRATORY AND JAW CRUSHERS. By H. L. Wollenberg. E. & M. J., vol. 90, p. 509. 9½ columns. D.

CAPACITY OF CRUSHERS. Min. Mag., London, vol. 2, p. 45. 3 columns.

STONE BREAKERS FOR DRY CRUSHING. T. Au. I. M. E., vol. 6, p. 47. 3 pages.

THE EFFICIENCIES OF CRUSHERS. By R. W. Chapman. M. & M., vol. 30, p. 413. 2 columns. D.

A NEW COAL BREAKER (REDUCER). M. & M., vol. 29, p. 252. ¼ column. I.

COARSE CRUSHING AT THE BOSTON CONSOLIDATED MILL AT GARFIELD, UTAH. By L. S. Austin. Min. & Sci. Press, vol. 100, p. 123. 3 columns. I.

CRUSHING IN THE ELY, NEVADA, MILL. M. & M., vol. 29, p. 169. 1 column.

THE NEW COCHRAN CRUSHER. By J. T. Barkelew. E. & M. J., vol. 88, p. 264. 4 columns. I.

CRUSHING MACHINES FOR CYANIDE PLANTS. By M. R. Lamb. T. A. I. M. E., vol. 41, p. 672, 4½ pages; p. 913, 1 page.

See also **CYANIDING OF GOLD and FINE CRUSHING, ETC.**

CRUSHERS USED IN THE COEUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1207. 4 columns. I.

See also **COST OF REDUCTION.**

Rolls: Construction and Operation

RULE FOR FIGURING CAPACITY OF ROLLS. By C. F. Spaulding. M. & M., vol. 31, p. 468. Note.

ROLLS IN THE COEUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1209, 1 column; p. 1210, 3 columns.

TANDEM ROLLS. E. & M. J., vol. 87, p. 939. 1 column.

See also first volume of **INDEX and COST OF REDUCTION.**

Stamp Mill Practice

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By W. A. Caldecott. T. I. M. & M., vol. 19, p. 57. 89 pages. I.

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By W. A. Caldecott. E. & M. J., vol. 88, p. 594. 12½ columns. I.

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By H. S. Denny. E. & M. J., vol. 88, p. 1157. 4½ columns.

DEVELOPMENT OF GRAVITY STAMPS. By W. A. Caldecott. M. & M., vol. 30, p. 389. 9 columns. I.

DEVELOPMENT OF GRAVITY STAMPS. By C. O. Schmitt. M. & M., vol. 30, p. 625. 11 columns. I.

- THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS.** By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 10, p. 108, 13 columns, I.; p. 178, 2 columns; p. 215, 13 columns; p. 331, 3 columns; p. 352, 29½ columns, I.; p. 241, 23 columns, I.
- EVOLUTION OF THE GRAVITY STAMP MILL.** By A. Del Mar. E. & M. J., vol. 87, p. 890. 2 columns.
- NOTES ON THE CONSTRUCTION AND OPERATION OF STAMP MILLS.** By G. H. Fison. E. & M. J., vol. 88, p. 1131. 3½ columns.
- CONSTRUCTION AND OPERATION OF THE STAMP MILL.** P. C. M. & M. Soc. S. A., vol. 10, p. 261. 4 columns.
- PRACTICAL WORKING OF THE STAMP MILL.** By A. Del Mar. E. & M. J., vol. 88, p. 548. 4 columns.
- LIMITATIONS OF ONE AND FIVE STAMP BATTERIES.** By A. Del Mar. Min. & Sci. Press, vol. 100, p. 640. 3½ columns.
- POWER REQUIRED FOR STAMPS.** Min. & Sci. Press, vol. 100, p. 222. ½ column. D.
- POSITION OF DRIVING POWER FOR STAMP MILLS.** By A. Del Mar. E. & M. J., vol. 89, p. 7. ½ column. I.
- See also **GENERAL APPLICATIONS OF POWER.**
- STAMPS IN AMALGAMATION.** P. C. M. & M. Soc. S. A., vol. 5, p. 50. 8 columns.
- See also **AMALGAMATION OF GOLD AND SILVER.**
- THE CALIFORNIA STAMP MILL.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 736. 5 columns. I.
- TREMAIN STEAM STAMPS.** By C. E. Parsons. Min. & Sci. Press, vol. 97, p. 386. 7 columns. I.
- WILSON'S STEAM STAMP MILL.** Min. & Sci. Press, vol. 20, p. 225. 1 page. I.
- THE HOLMAN AIR-CUSHION STAMP.** By E. Walker. E. & M. J., vol. 86, p. 213. 2½ columns. I.
- STAMPING: Reduction of Ores in Hungary.** Min. Mag., vol. 3, p. 262. 1½ pages.
- A MAKE-SHIFT STAMP MILL.** Min. & Sci. Press, vol. 95, p. 619. ¼ column. I.
- BATTERY POSTS OF REINFORCED CONCRETE.** By A. Del Mar. E. & M. J., vol. 88, p. 598. 2 columns. I.
- CONCRETE BATTERY POSTS.** E. & M. J., vol. 88, p. 598. 2 columns. I.
- See also **USE OF CONCRETE IN MINES.**
- NOTE ON A MODIFICATION OF THE NORMAL TYPE OF BATTERY FRAME.** By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 8, p. 198. 1 column. I.
- See also **FOUNDATIONS FOR MILL BUILDINGS.**
- CUSHIONING VIBRATIONS OF CAM-SHAFTS.** By A. Del Mar. Min. & Sci. Press, vol. 97, p. 877. 1½ columns. I.
- THE PROPER DESIGN OF CAMS.** By M. R. Lamb. E. & M. J., vol. 88, p. 66. 4½ columns. I.
- REPAIRING A MORTAR BOX PILE.** By A. Richardson. P. C. M. & M. Soc. S. A., vol. 9, p. 24. 4 columns. I.
- SOME ACCESSORY STAMP MILL APPLICATIONS.** By S. O. Smart. P. C. M. & M. Soc. S. A., vol. 7, p. 133, 3 columns, I.; p. 183, 1 column; p. 269, 1 column; p. 292, 2 columns.
- LOW MORTARS AND HIGH HEADS.** By M. P. Boss. Min. & Sci. Press, vol. 101, p. 866. 2½ columns. I.
- EFFECT OF DISCHARGE LEVEL AND WATER SUPPLY ON STAMP CAPACITY.** E. & M. J., vol. 86, p. 386. 1 column.
- STAMP DROP SEQUENCE.** E. & M. J., vol. 89, p. 204. 2½ columns.
- STAMP DROP SEQUENCE.** E. & M. J., vol. 89, p. 597. 1 column.

- STAMP DROP SEQUENCE.** By W. H. Storms. E. & M. J., vol. 90, p. 109. 1 column. I.
- STAMP DROP SEQUENCE.** By H. S. Munroe. E. & M. J., vol. 90, p. 949. 1 column. D.
- STAMP MILL PRACTICE AT MINAS DEL TAJO, SINALOA.** E. & M. J., vol. 89, p. 567. 2 columns.
- BATTERY PRACTICE AT THE PITTSBURG SILVER PEAK MILLS.** Min. & Sci. Press, vol. 98, p. 658. 1 column. I.
- STAMP MILL PRACTICE AT THE SUMMER DEEP AND JUPITER REDUCTION WORKS.** Min. & Sci. Press, vol. 99, p. 396. 6½ columns. I.
- STAMP MILL PRACTICE ON THE MOTHER LODGE.** By A. Chalmers. Min. & Sci. Press, vol. 97, p. 785. 1½ columns.
- A FEW NOTES ON STAMP MILLING.** By W. H. Jane. P. C. M. & M. Soc. S. A., vol. 8, p. 290, 2 columns; vol. 9, p. 21, 1½ columns; p. 46, 4 columns.
- SOME NOTES ON GOLD MILLING: Stamp Milling.** By W. H. Vale. T. Au. I. M. E., vol. 5, p. 124. 6 pages. I.
- SOME NOTES ON GOLD MILLING PRACTICE IN BENDIGO: Stamp Milling.** By H. C. Boydell. T. Au. I. M. E., vol. 8, pt. 2, p. 236. 14 pages. I.
- MONTANA-TONOPAH STAMP AND CYANIDE MILL.** E. & M. J., vol. 85, p. 959. 5 columns. I.
- STAMP BATTERIES OF THE GOLDFIELD MILL.** E. & M. J., vol. 86, p. 470. 2 columns. I.
- A GOLD STAMP MILL FOR LABORATORY TESTING.** By F. H. Sexton. J. M. Soc. N. S., vol. 10, p. 125. 7½ pages. I.
- See also **METALLURGY OF GOLD AND SILVER, CYANIDING GOLD, AMALGAMATION OF GOLD AND SILVER**, first volume of INDEX, COST OF MINE AND MILL CONSTRUCTION, and COST OF REDUCTION.
- Fine Crushing by Mills: Ball and Miscellaneous Types**
- FINE GRINDING.** By H. S. Denny. Min. Mag., vol. 4, p. 219. 9 columns. D.
- GRINDING ORES AND MINERALS.** Min. & Sci. Press, vol. 101, p. 176. 1 column.
- EFFICIENCY OF FINE GRINDING MACHINES.** By H. Stadler. M. & M., vol. 30, p. 672. 2½ columns.
- THE COMPUTATION OF CRUSHING EFFICIENCY OF FINE GRINDING MACHINES.** P. C. M. & M. Soc. S. A., vol. 10, p. 374. 3 columns.
- CRUSHING EFFICIENCY OF FINE GRINDING MACHINES.** By H. Stadler. Min. & Sci. Press, vol. 100, p. 900. 1½ columns. *
- GRINDING TESTS AT PACHUCA.** By V. B. Sherrod. Min. & Sci. Press, vol. 100, p. 357. 6 columns. I.
- BALL MILL FOR DRY CRUSHING.** T. Au. I. M. E., vol. 6, p. 45, 2 pages; p. 53, 6 pages, I.
- See also **THE REDUCTION OF ORE: ETC.**
- THE FERRARIS WET-BALL MILL AS USED IN SARDINIA.** T. A. I. M. E., vol. 39, p. 88. 4½ pages. I.
- THE CHILE MILL.** By M. R. Lamb. E. & M. J., vol. 87, p. 1182. 2½ columns. I.
- SOME OF THE CHARACTERISTICS OF CHILEAN MILLS.** By H. A. Megraw. E. & M. J., vol. 90, p. 967. 7 columns. I.
- INEXPENSIVE HOMEMADE 20-TON MILL: Arastra.** By T. Köhncke. Min. & Sci. Press, vol. 97, p. 185. 2½ columns. I.
- THE LANE MILL: A Slow-speed Edge Mill.** E. & M. J., vol. 85, p. 1053. 2 columns. I.
- DRY CRUSHING WITH KRUPP OR GRIF-FIN MILL.** Min. & Sci. Press, vol. 101, p. 402. 1 column.
- See also **THE REDUCTION OF ORES: ETC.**

HOMEMADE GRINDING PAN. By W. H. Washburn. Min. & Sci. Press, vol. 100, p. 103. 1½ columns. I.

THE TUBE-MILL IN SLIME TREATMENT. Min. & Sci. Press, vol. 101, p. 777. 1½ columns. I.

See also **SLIMES AND THEIR TREATMENT.**

THE TUBE-MILL CIRCUIT AND CLASSIFICATION. By G. O. Smart. P. C. M. & M. Soc. S. A., vol. 10, p. 282, 11½ columns, I.; p. 452, 8½ columns, I.; p. 397, 8 columns, I.

See also **CLASSIFIERS AND CLASSIFICATION.**

THE PROBLEM OF FINE GRINDING IN TUBE MILLS. By H. W. Hardinge. E. & M. J., vol. 90, p. 1057. 4 columns. I.

NOTES ON SOME RECENT IMPROVEMENTS IN TUBE MILL PRACTICE. By K. L. Graham. P. C. M. & M. Soc. S. A., vol. 7, p. 317, 8 columns, I.; p. 368, 6 columns, I.; vol. 8, p. 18, 3 columns; p. 51, 2 columns; p. 78, 5½ columns.

THE COMPUTATION OF THE CRUSHING EFFICIENCY OF TUBE MILLS. By S. H. Pearce and W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 7, p. 72, 4½ columns; p. 120, 4 columns, D.; p. 207, 8½ columns; p. 265, 7 columns, D.; p. 289, 1 column.

THE THEORY OF THE TUBE MILL. By H. A. White. P. C. M. & M. Soc. S. A., vol. 5, p. 290, 28½ columns, I.; vol. 6, p. 52, ½ column; p. 81, ½ column; p. 112, 2 columns.

A LABORATORY COMPARISON OF TUBE MILL PEBBLES. By G. H. Stanley. P. C. M. & M. Soc. S. A., vol. 8, p. 376. 4½ columns. I.

TUBE MILL CRUSHING IN CONNECTION WITH CYANIDING SLIMES. By E. B. Wilson. M. & M., vol. 29, p. 8. 5½ columns. I.

See also **CYANIDING GOLD AND SILVER.**

TUBE MILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 235. 1 column.

NOTES ON TUBE MILLS. Min. & Sci. Press, vol. 95, p. 555. 1½ columns.

TUBE MILLING AND THE DIAPHRAGM CONE. Min. & Sci. Press, vol. 100, p. 483. 7 columns. I.

TUBE MILLS FOR REGRINDING. E. & M. J., vol. 88, p. 597. 2 columns.

See also **THE REDUCTION OF ORES: ETC.**

THE MULTIPLE TUBE MILL. E. & M. J., vol. 90, p. 1163. ½ column. I.

TUBE MILL POWER. By H. E. West. E. & M. J., vol. 90, p. 1243. 1½ columns.

See also **GENERAL APPLICATIONS OF POWER.**

TUBE MILL PRACTICE. By W. R. Dowling. P. C. M. & M. Soc. S. A., vol. 6, p. 308, 13½ columns; p. 369, 12 columns, I.; p. 12, 1½ columns; p. 44, 2 columns; p. 74, 3½ columns.

A CONICAL TUBE MILL. By H. W. Hardinge. Min. & Sci. Press, vol. 96, p. 223. 3½ columns. I.

THE HARDINGE CONICAL PEBBLE MILL. By H. W. Hardinge. M. & M., vol. 29, p. 160. 3 columns. I.

THE HARDINGE CONICAL PEBBLE MILL. By H. W. Hardinge. T. A. I. M. E., vol. 39, p. 336. 5 pages. I.

LIFE OF TUBES MILL LINERS. P. C. M. & M. Soc. S. A., vol. 9, p. 241. ½ column.

TUBE MILL LINING. P. C. M. & M. Soc. S. A., vol. 7, p. 417. 1 column.

HONEYCOMB LINERS. P. C. M. & M. Soc. S. A., vol. 8, p. 11. 3 columns. I.

EL ORO TUBE MILL LINING. E. & M. J., vol. 85, p. 811. ½ column. I.

TUBE MILL LINING. By H. E. West. Min. & Sci. Press, vol. 96, p. 418. 4 columns. I.

LINING FOR TUBE MILL. Min. & Sci. Press, vol. 95, p. 466. ½ column. I.

FINE GRINDING TESTS: Tube Mill and Grinding Pans, Broken Hill South Mine. By W. E. Wainwright and W. J. M'Bride. T. Au. I. M. E., vol. 13, p. 38. 20 pages. I.

GRINDING IN TUBE MILLS AT THE WAIHI GOLD MINE, WAIHI, NEW ZEALAND. By E. G. Banks. T. A. I. M. E., vol. 38, p. 196. 4 pages.

TUBE MILLS AT THE GOLDFIELD MILL. E. & M. J., vol. 86, p. 470. 1 column.

TUBE MILLS AT PACHUCA. Min. & Sci. Press, vol. 100, p. 357. 6 columns. I.

TUBE MILLS AT GUANAJUATO. By C. W. Van Law. Min. & Sci. Press, vol. 95, p. 205. 1 column.

See also CYANIDING GOLD AND SILVER. See also METHODS OF ASSAYING, ETC. See also CYANIDING PLANTS, and COST OF REDUCTION.

FINE GRINDING IN 1906. E. & M. J., vol. 83, p. 17. 2½ columns.

ROPES FOR MINE USE

Kinds of Wire Rope, Methods of Manufacture, Etc.

NON-SPINNING ROPES. P. C. M. & M. Soc. S. A., vol. 9, p. 245. ½ column.

See also first volume of INDEX.

See also COST OF HOISTING, and COST OF ROPES.

Wire: Its Use and Manufacture

WIRE WINDING ROPES. P. C. M. & M. Soc. S. A., vol. 7, p. 188. 2½ columns.

WIRE ROPES IN COLLIERY PRACTICE. By R. H. Rowland. E. & M. J., vol. 89, p. 278. 8½ columns. I.

See also first volume of INDEX, and ROPES, CHAINS, COUPLINGS, ETC.

Paper and Fiber Ropes

See first volume of INDEX.

Connections for Wire Ropes, Splicing, Etc.

METHOD OF SPLICING WIRE AND OTHER ROPES. By J. Watt. E. & M. J., vol. 89, p. 414. 5½ columns. I.

SOME USEFUL KNOTS FOR ENGINEERS: Tying Knots in Ropes. By A. L. Oke. E. & M. J., vol. 89, p. 697, 3½ columns, I.; p. 761, 3½ columns, I.; p. 810, 3 columns, I.; p. 906, 3 columns, I.

See also ROPES, CHAINS, COUPLINGS, ETC.

Strength of Ropes, Working Stresses, Examination and Tests

WIRE ROPE FORMULAS. M. & M., vol. 30, p. 636. 1 column. D.

STRESSES ON WINDING AND CONDUCTING ROPES, AS USED IN MINE-SHAFTS. By J. Hindley and J. Stoney. T. I. M. E., vol. 36, p. 286. 7 pages. I.

NOTES ON THE WORKING AND TESTING OF LOCKED-COIL WINDING ROPE. By J. Elce. T. I. M. E., vol. 37, p. 635. 14 pages. I.

THE STRESS IN WIRE ROPES DUE TO BENDING. By R. W. Chapman. T. A. I. M. E., vol. 12, p. 131. 22 pages. D.

BENDING STRESSES IN WIRE ROPES. P. C. M. & M. Soc. S. A., vol. 9, p. 318. ½ column.

HOISTING ROPES: Factor of Safety, Inspection, Etc. E. & M. J., vol. 90, p. 603. ½ column.

ROPE STRAINS IN HOISTING. By C. W. Beers. E. & M. J., vol. 88, p. 362. 3½ columns. D.

See also ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPES, ETC.

Care and Protection of Wire Rope

LIFE OF LANG'S LAY WINDING-ROPES. P. C. M. & M. Soc. S. A., vol. 7, p. 189. Table.

NOTES ON CORROSION, WITH SPECIAL REFERENCE TO THE CORROSION OF STEEL WINDING ROPES. By M. T. Murray. P. C. M. & M. Soc. S. A., vol. 10, p. 54, 11½ columns, I.; p. 204, 2 columns.

A ROPE OILER. M. & M., vol. 29, p. 27. ½ column. I.

See also first volume of INDEX.

Breakage of Wire Rope

See first volume of INDEX.

SAMPLING OF MINES AND ORES

Mine Sampling

DEVELOPMENT, SAMPLING AND ORE-VALUATION OF GOLD MINES. By C. B. Horwood and Mungo Park. T. A. I. M. E., vol. 39, p. 685. 9 pages. I.

SAMPLING IN WEST AUSTRALIA. E. & M. J., vol. 86, p. 340. ½ column.

SOME NOTES ON SAMPLING FOR GOLD. By T. Turnbull. T. Au. I. M. E., vol. 3, p. 71. 4 pages.

RAND SAMPLING PRACTICE. By J. S. Olver. Min. & Sci. Press, vol. 97, p. 674. 4 columns.

MINE SAMPLING AT THE KANSANSHI MINE. Min. & Sci. Press, vol. 96, p. 528. 6 columns.

SAMPLING IN THE ALICE MINE, COLORADO. M. & M., vol. 29, p. 295. ½ column.

See also PRACTICE IN SAMPLING: ETC., METHODS OF SAMPLING AND APPARATUS, and COST OF SAMPLING.

Methods of Sampling and Apparatus Employed

NOTES ON SAMPLING. By A. C. Thomas. T. Au. I. M. E., vol. 10, p. 276. 12 pages.

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PRINCIPLES OF MINE SAMPLING. By J. A. Church. E. & M. J., vol. 86, p. 951. 9 columns. I.

CONSTANT ERRORS IN MINE SAMPLING. By L. D. Ricketts. E. & M. J., vol. 90, p. 316. 3 columns.

See also MINE SAMPLING.

CONSTANT ERRORS IN SAMPLING AND ASSAYING. By L. D. Ricketts. Min. Mag., London, vol. 4, p. 127. 8 columns. I.

METALLICS IN SAMPLING WORK. P. C. M. & M. Soc. S. A., vol. 7, p. 420. 2 columns.

SAMPLING AND WEIGHING. By H. W. Moss. T. Au. I. M. E., vol. 8, pt. 1, p. 92. 5 pages.

SAMPLING DEVICES. E. & M. J., vol. 87, p. 218. ½ column. I.

MACHINE SAMPLING. E. & M. J., vol. 86, p. 238, 2 columns; p. 339, 1½ columns; p. 431, 6 columns; p. 631, 1 column; p. 917, 5½ columns; p. 1018, 6 columns; vol. 87, p. 269, 9 columns, I.; p. 420, 1½ columns; p. 516, 4 columns; p. 862, 2 columns.

ACCURACY OF MECHANICAL AND RIFFLE ORE SAMPLERS. By L. D. Hunton. E. & M. J., vol. 90, p. 62. 9½ columns.

NOTES ON STOPE BOX SAMPLING. By W. Bradford. P. C. M. & M. Soc. S. A., vol. 6, p. 103, 13 columns; p. 195, 2½ columns; p. 224, 2½ columns; p. 339, 4 columns.

See also MINE SAMPLING.

AN AUTOMATIC ORE SAMPLER. E. & M. J., vol. 86, p. 181. 1 column. I.

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See also SAMPLING COAL AND ORES.

AUTOMATIC COAL SAMPLER. M. & M., vol. 31, p. 85. 1 column. I.

MECHANICAL COAL SAMPLER. By C. E. Scott. M. & M., vol. 31, p. 169. 2½ columns. I.

See also SAMPLING COAL AND ORES.

A SIMPLE SAMPLING DEVICE. By F. Cazin. E. & M. J., vol. 89, p. 358. 1 column. I.

A SIMPLE SAMPLING DEVICE. E. & M. J., vol. 90, p. 1146. $\frac{1}{2}$ column. I.

A NEW SAMPLING DEVICE. By A. L. Oke. E. & M. J., vol. 86, p. 122. $\frac{1}{2}$ column. I.

THE COLE SAMPLER. E. & M. J., vol. 85, p. 1198. 2 columns. I.

SAMPLER FOR LEAD CONCENTRATES. E. & M. J., vol. 90, p. 253. $\frac{1}{2}$ column. I.

MINE SAMPLING DEVICES. By H. E. Hooper. Min. & Sci. Press, vol. 97, p. 704. 1 column. I.

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See also MINE SAMPLING.

HAULTAIN SAMPLER FOR WET SANDS IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 875. 2 columns. I.

A BATTERY FEED SAMPLER. By J. H. Oates. E. & M. J., vol. 89, p. 1005. 1 column. I.

See also STAMP MILL PRACTICE.

IMPROVED SANDS AND SLIMES SAMPLERS. By H. Leupold. P. C. M. & M. Soc. S. A., vol. 5, p. 122. 4 columns. I.

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See also CYANIDING GOLD AND SILVER ORES and COST OF SAMPLING.

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SAMPLING COAL AND COKE. By E. G. Bailey. M. & M., vol. 31, p. 190, $5\frac{1}{2}$ columns, I.; p. 209, 2 columns.

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CAUSES OF VARIATIONS IN ORE SAMPLING. By T. Kiddie. J. C. M. I., vol. 13, p. 556. 21 $\frac{1}{2}$ pages.

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SAMPLING AND BUYING ORE IN THE JOPLIN DISTRICT. By E. W. Buekett. E. & M. J., vol. 86, p. 190. 3 columns.

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SAMPLING ORES ON THE WEST COAST OF TASMANIA. By F. D. Power. T. Au. I. M. E., vol. 3, p. 237. 6 pages.

THE SAMPLING OF SILVER-COBALT ORES AT COPPER CLIFF, ONTARIO. By A. A. Cole. J. C. M. I., vol. 11, p. 287. 6 pages. I.

ORE SAMPLING BY MACHINERY. By J. A. Church. E. & M. J., vol. 86, p. 113. 7½ columns.

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See also **METHODS OF SAMPLING AND APPARATUS** and **MINE SAMPLING**.

See also **DECOMPOSITION OF COAL** and **COST OF SAMPLING**.

Sampling and Measurement of Ore Bodies

SAMPLING LOW-GRADE AND IRREGULAR OREBODIES. E. & M. J., vol. 90, p. 750. 1½ columns.

See also **METHODS OF SAMPLING AND APPARATUS**, **MINE SAMPLING**, **SAMPLING COAL AND ORES**, and first volume of **INDEX**.

Practice in Sampling Minerals, Gravels, Etc.

SAMPLING PLACER GROUND. E. & M. J., vol. 89, p. 561. 5 columns. I.

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See also **PROSPECT DRILLING**, **CHURN DRILLS AND DRILLING**, and **MACHINE OR POWER DRILLS**.

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INFLUENCE OF NUMBER OF TEMPLET HOLES IN SAMPLING COPPER. By D. M. Liddell. E. & M. J., vol. 90, p. 953. 2 columns. I.

TOP AND BOTTOM DRILLING IN PIG COPPER. By D. M. Liddell. E. & M. J., vol. 90, p. 897. 2 columns.

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SAMPLING LEAD CONCENTRATES. E. & M. J., vol. 89, p. 1216. ½ column. I.

SAMPLING AND ASSAYING SPELTER. By E. W. Buskett. E. & M. J., vol. 85, p. 812. 2½ columns.

SAMPLING THE PRODUCTS OF CONCENTRATING AND SLIMING TABLES. P. C. M. & M. Soc. S. A., vol. 6, p. 175. 1½ columns.

See also **CONCENTRATORS: TABLES, BUDDLES, ETC.**

THE GOLDFIELD CONSOLIDATED SAMPLING MILL. By J. A. Church. E. & M. J., vol. 87, p. 311. 3½ columns. I.

SIZING OF MINERAL**Screens, Theory of Sizing, Etc.**

SCREEN ASSAY VALUE. P. C. M. & M. Soc. S. A., vol. 7, p. 362. 1 column.

THE SCREEN ASSAY ON THE MEYER AND CHARLTON G. M. UNDER "THE NEW METALLURGY." By C. Toombs. P. C. M. & M. Soc. S. A., vol. 7, p. 277, 4½ columns; p. 331, 2 columns; p. 360, 4½ columns; p. 411, 6½ columns; vol. 8, p. 44, 3½ columns.

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THE STANDARDIZATION OF BATTERY SCREENING. P. C. M. & M. Soc. S. A., vol. 7, p. 47. 2½ columns.

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REPORT OF SUB-COMMITTEE ON THE STANDARDIZATION OF BATTERY SCREENS. P. C. M. & M. Soc. S. A., vol. 6, p. 393. 24 columns. Tables.

CLOSE SIZING OF DRY FINELY CRUSHED ORES. By E. G. Steele. E. & M. J., vol. 87, p. 493. 7½ columns. I.

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See also first volume of INDEX.

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LABORATORY SCREENS. P. C. M. & M. Soc. S. A., vol. 10, p. 73. 2 columns.

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See also **SCREENS and THEORY OF SIZING.**

TROMMELS USED IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 89, p. 25. 8 columns. I.

GYRATORY SCREENS. E. & M. J., vol. 87, p. 494. 1 column.

THE "VIBRACONE" SEPARATOR. E. & M. J., vol. 85, p. 902. 1 column. I.

THE CALLOW SCREEN. P. C. M. & M. Soc. S. A., vol. 9, p. 313. 2 columns.

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See also **CLASSIFIERS and CLASSIFICATION.**

UNDERGROUND GRIZZLIES. E. & M. J., vol. 88, p. 1279. 2½ columns. I.

SCREENING OF ORES IN SARDINIA. T. A. I. M. E., vol. 39, p. 73. 3½ pages. I.

CLAY SCREENS vs. DRYING ORES. By H. W. Fox. M. & M., vol. 30, p. 615. 3 columns. I.

See also **COST OF SIZING.**

SIGNALING IN MINES

Signal Codes for Mines

MINE SIGNALS. E. & M. J., vol. 85, p. 151. 1 column.

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SIGNALS IN QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 414. $\frac{1}{2}$ page.

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Methods of Signaling

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See also COST OF SIGNALING.

Compressed Air, Electricity, Telephones, Etc.

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TELEPHONES FOR MINE USE. M. & M., vol. 29, p. 281. 2 $\frac{1}{2}$ columns. I.

A PORTABLE TELEPHONE EQUIPMENT. By H. M. Payne. E. & M. J., vol. 89, p. 382. 1 column.

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Methods of Surveying

ON MINING SURVEYS. By A. Beaulands. *Min. Mag.*, vol. 9, p. 337. 3 pages.

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DETERMINATION OF THE MERIDIAN. By F. A. Dalburg. *M. & M.*, vol. 30, p. 668. 3 columns.

SEPARATE LEAF SYSTEM FOR RECORDING SURVEY NOTES. By L. Fraser. *E. & M. J.*, vol. 88, p. 1268. 5 columns. D.

SURVEYING THE PUBLIC LAND OF THE UNITED STATES. By H. W. MacFarren. *Min. & Sci. Press*, vol. 100, p. 189. 8 columns. D.

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See also SURVEYING INSTRUMENTS and SURFACE SURVEYS.

Surveying Instruments

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See also METHODS OF SURVEYING.

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See also first volume of INDEX.

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See also MINE ROADS, ETC.

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See also METHODS OF SURVEYING.

Underground Surveys

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See also MAP MAKING.

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COLLIERY SURVEY NOTES. By R. Shumway. M. & M., vol. 31, p. 61. 1½ columns. I.

SURVEYING AT LYTLE COLLIERY. By J. H. Hærtter. M. & M., vol. 29, p. 108. 5½ columns. I.

COLLIERY SURVEYS. By D. Harrington. M. & M., vol. 30, p. 94, 6½ columns; p. 234, 2½ columns; p. 305, 5½ columns; p. 337, 5 columns, I.; p. 439, 5 columns.

SURVEYING AN INACCESSIBLE STOPE. By A. E. Robinson. Min. & Sci. Press, vol. 101, p. 678. 1½ columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 9, p. 375. 28 columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 10, p. 18, 1½ columns; p. 63, 3½ columns, I.; p. 105, 2 columns; p. 140, 2½ columns, I.; p. 369, 7½ columns.

TUNNEL SURVEY IN AN ANTHRACITE COLLIERY. By D. P. Jones. E. & M. J., vol. 89, p. 881. 2½ columns. I.

UNDERGROUND CURVES. E. & M. J., vol. 89, p. 1149. 1 column. I.

See also **MINE ROADS, TRACKS, ETC.**

A DISCUSSION OF MINE CURVE PROBLEMS. By J. E. Tiffany. E. & M. J., vol. 86, p. 230. 12½ columns. I.

CONTOUR MAPS OF ORE-BODIES. M. & M., vol. 29, p. 343. ½ column. I.

See also **COST OF SURVEYING.**

Shaft-Plumbing

PLUMBING A DEEP SHAFT. Min. & Sci. Press, vol. 95, p. 427. 1½ columns.

PLUMBING A SHAFT IN THE ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 37. 2½ columns. I.

MODERN METHOD OF PLUMBING A SHAFT. By J. P. Davis. E. & M. J., vol. 89, p. 1174. 5 columns. I.

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TRANSPORTATION

Methods of Transportation

TRANSPORTATION. By R. Reford. J. M. Soc. N. S., vol. 12, p. 23. 34 pages.

COAL MINE TRANSPORTATION. By E. B. Wilson. M. & M., vol. 31, p. 408. 3½ columns. I.

See also **HAULAGE SYSTEMS.**

TRANSPORTATION IN NICARAGUA. T. A. I. M. E., vol. 41, p. 602. 2 pages.

TRAVEL IN COLOMBIA. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 350. 4 columns. Map.

PNEUMATIC TRANSPORTATION OF COAL. E. & M. J., vol. 89, p. 674. ½ column.

See also **COMPRESSED AIR IN MINING.**

HINTS TO ORE SHIPPERS. By S. E. Bretherton. Min. & Sci. Press, vol. 101, p. 530. 5½ columns.

See also **ECONOMIC AND INDUSTRIAL FEATURES OF MINING.**

Portage, Packing and Fluming

PORTAGE IN THE BOLIVIAN TIN MILLS. E. & M. J., vol. 90, p. 1054. ½ column.

PACKING 13,000 FEET OF STEEL CABLE OVER A MOUNTAIN TRAIL. E. & M. J., vol. 86, p. 672. 1 column. I.

TRANSPORTATION BY ANIMALS IN MEXICO. E. & M. J., vol. 88, p. 680. 1 column.

MULE-BACK TRANSPORTATION OF SECTIONALIZED MACHINERY. By F. C. Roberts and W. W. Bradley. Min. & Sci. Press, vol. 98, p. 751. 9½ columns. I.

TRANSPORTATION BY SLUICE. E. & M. J., vol. 85, p. 1058. 1 column.

TRANSPORTATION OF COAL BY FLUME. By R. M. Magraw. M. & M., vol. 30, p. 236. 6 columns. I.

TRANSPORT OF MACHINERY IN MOUNTAINOUS COUNTRIES. By H. H. Kress and A. S. Cameron. Min. & Sci. Press, vol. 95, p. 471. 2 columns. I.

See also **COST OF PACKING AND PORTAGE and COST OF TRANSPORTATION.**

Transportation by Rail

ALLOTMENT OF CARS ALONG THE CHESAPEAKE AND OHIO RAILWAY COMPANY. M. & M., vol. 29, p. 400. 1 column.

METHOD OF COAL CAR ALLOTMENT USED BY CAR ALLOTMENT COMMISSION OF THE NORFOLK AND WESTERN RAILWAY COMPANY. By W. A. Jenks. M. & M., vol. 29, p. 470. 1½ columns.

MINE INSPECTION FOR CAR ALLOTMENT. By H. B. Douglas. M. & M., vol. 30, p. 92. 3½ columns.

See also **INSPECTION OF MINES.**

CAR DISTRIBUTION TO COAL MINES. E. & M. J., vol. 90, p. 599. 2 columns.

COAL DISTRIBUTION AND THE OWNERSHIP OF COAL CARS. E. & M. J., vol. 86, p. 623. 1 column.

SOME PHASES OF THE AMERICAN RAILROAD PROBLEM. By S. Fish. Sch. Mines Quart., vol. 29, p. 1. 14 pages.

LIGHT RAILWAYS. By A. Campbell. T. A. I. M. E., vol. 2, p. 85, 13 pages. I.

THE RAILROAD SYSTEMS OF NORTHERN MEXICO. By H. A. Horsfall. E. &

M. J., vol. 87, p. 712. 4 columns. Map.

NARROW-GAUGE RAILWAYS FOR MINES AND SMELTING WORKS. By O. W. Scholz. E. & M. J., vol. 86, p. 1052. 1½ columns.

A EUROPEAN ELECTRIC COLLIERY RAILWAY. By J. B. Van Brussel. E. & M. J., vol. 89, p. 378. 5½ columns. I.

See also **ELECTRICITY IN THE MINE.**

COPPER RIVER AND NORTHWESTERN RAILROAD, ALASKA. By L. W. Storm. E. & M. J., vol. 90, p. 77. 8½ columns. I.

AN ORE TRANSPORTING RAILWAY IN THE PYRENEES. By A. Gradenwitz. E. & M. J., vol. 87, p. 1119. 7 columns. I.

A NEW ARIZONA-SONORA RAILROAD. E. & M. J., vol. 90, p. 368. 3 columns. Map.

See also **COST OF TRANSPORTATION.**

Capacity of Cars, Gauge, Etc.

See first volume of INDEX.

Rails, Rail-Sections, Etc.

STEEL RAILS. P. C. M. & M. Soc. S. A., vol. 9, p. 171. 1 column.

STEEL RAILS FOR PRESENT SERVICE: Their Manufacture and Their Failures. By P. H. Dudley. J. W. Soc. E., vol. 13, p. 471. 17½ pages. I.

ON THE DURABILITY OF RAILROAD IRON. By W. Truran. Min. Mag., vol. 4, p. 248, 10 pages; vol. 5, p. 291, 2 pages.

STANDARD RAIL SECTIONS AND FISH BAR JOINTS. By W. R. Jones. P. E. Soc. W. Pa., vol. 3, p. 33. 21 pages. I.

COMPARISON OF AMERICAN AND FOREIGN RAIL SPECIFICATIONS, WITH A PROPOSED STANDARD SPECIFICATION TO COVER AMERICAN RAILS ROLLED FOR EXPORT: A Discussion of A. L. Colby Paper. T. A. I. M. E., vol. 38, p. 916. 7 pages.

A RELIABLE STEEL RAIL AND HOW TO MAKE IT. By J. E. York. T. A. I. M. E., vol. 40, p. 341. 13 pages. I.

See also **MINE ROADS AND TRACKS.**

Wagon Roads, Wagons and Traction Engines

ROAD RESISTANCES. By C. E. Morrison. Sch. Mines Quart., vol. 29, p. 159. 19 pages. I.

MACADAM ROADS AND THEIR PRESERVATION. By L. W. Page. J. W. Soc. E., vol. 15, p. 57. 23 pages.

SPECIFICATIONS AND NOTES ON MACADAM ROAD CONSTRUCTION. By A. N. Johnson. J. W. Soc. E., vol. 13, p. 767. 25 pages.

PRELIMINARY REPORT ON GEOLOGY OF COMMON ROADS OF UNITED STATES. By N. S. Shaler. U. S. G. S., 15th Ann. Rept., pp. 1-110. 1893-94.

FREIGHTING ORE WITH BIG STRING TEAMS. By G. C. McFarlane. E. & M. J., vol. 87, p. 1078. 4 columns.

See also **PORTAGE, PACKING AND FLUMING.**

ROAD DISTANCES IN NEVADA. Min. & Sci. Press, vol. 95, p. 748. ½ column.

See also **COST OF TRANSPORTATION.**

River Transportation

TRANSPORTATION FACILITIES IN ALASKA AND THE YUKON. By W. M. Brewer. Min. & Sci. Press, vol. 98, p. 485. 5½ columns. Map.

THE NILE AS A MINING RIVER. By A. Del Mar. Min. & Sci. Press, vol. 95, p. 463. 5½ columns. I.

WATER TRANSPORTATION IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 88, p. 301. 4½ columns.

THE OHIO RIVER: Improvement for Navigation. By J. W. Arras. P. E. Soc. W. Pa., vol. 24, p. 241. 37 pages. I.

THE MONONGAHELA RIVER: Methods of Improvement of Navigation. By T. P. Roberts. P. E. Soc. W. Pa., vol. 24, p. 193. 28 pages. I.

See also **METHODS OF TRANSPORTATION.**

Canal Transportation

CONSTRUCTION OF THE PANAMA CANAL. M. & M., vol. 30, p. 330. 2½ columns. I.

THE PANAMA CANAL. By G. H. Mee. M. & M., vol. 31, p. 241. 6½ columns. I.

INLAND WATER TRANSPORTATION IN ENGLAND. By J. Douglas. E. & M. J., vol. 89, p. 468. 4 columns.

See also first volume of **INDEX** and **COST OF TRANSPORTATION.**

Lake Transportation

See first volume of **INDEX.**

Ocean Transportation

A SHORT DESCRIPTION OF THE VARIOUS TYPES OF COAL CARGO STEAMERS AND OF DOXFORDS' NEW SELF-DISCHARGING STEAMER. By J. Kirsopp. T. I. M. E., vol. 37, p. 416. 25 pages. I.

See also first volume of **INDEX.**

Cableways: Their Construction and Use

THE USE OF AERIAL WIRE ROPE TRAMWAYS. By H. M. Payne. E. & M. J., vol. 89, p. 832. 6½ columns. I.

SOME GERMAN OVERHEAD TRAMWAYS. By A. Gradenwitz. E. & M. J., vol. 85, p. 449. 9 columns. I.

HALLIDIES' ENDLESS WIRE ROPE-WAY. Min. & Sci. Press, vol. 22, p. 104. 4 columns. I.

SHIPPING COAL BY AERIAL ROPEWAYS. T. I. M. E., vol. 36, p. 692. 8 pages. I.

- AERIAL TRAMWAY FOR COAL.** By R. M. Magraw. M. & M., vol. 29, p. 531. 6½ columns. I.
- THE DEL CARMEN AERIAL TRAMWAY, MEXICO.** M. & M., vol. 31, p. 437. 4 columns. I.
- THE ROPEWAY (OTTO) AT THE PIERREFITTE MINES, FRANCE.** T. A. I. M. E., vol. 39, p. 374. 5 pages. I.
- TRANSPORTATION BY ELECTRICAL SUSPENDED RAILWAY.** By A. Gradenwitz. E. & M. J., vol. 88, p. 912. 9 columns. I.
- AERIAL OR WIRE ROPE HAULAGE.** M. & M., vol. 31, p. 46. 4 columns. I.
- UTAH CONSOLIDATED AERIAL TRAMWAY.** By L. A. Palmer. M. & M., vol. 31, p. 150. 3½ columns. I.
- See also first volume of INDEX, COST OF TRAMMING, and COST OF OPERATING TRAMWAYS.

TUNNELING

Methods of Tunneling

- PROBLEMS IN TUNNEL DRIVING.** By C. R. Gent. M. & M., vol. 30, p. 279. 2½ columns.
- PROBLEMS OF TUNNEL DRIVING.** By C. R. Gent. M. & M., vol. 30, p. 509. 1 column. I.
- BLASTING IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL.** E. & M. J., vol. 86, p. 757. 2 columns.
- BLASTING IN THE ROOSEVELT TUNNEL.** M. & M., vol. 29, p. 389. 1 column.
- See also **BLASTING IN MINES: METHODS AND CONDITIONS.**
- METHOD OF DRIVING THE LOS ANGELES AQUEDUCT TUNNEL.** M. & M., vol. 31, p. 140. 5 columns. I.
- MINING METHODS IN NEW YORK TUNNELS.** E. & M. J., vol. 88, p. 1236. 3 columns. I.
- MINING OPERATIONS IN NEW YORK CITY AND VICINITY.** By H. T. Hildage. T. A. I. M. E., vol. 38, p. 360. 38 pages. I.
- ADVANCING THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL.** By H. M. Adkinson. E. & M. J., vol. 86, p. 757. 6½ columns. I.
- See also **DIFFICULTIES ENCOUNTERED IN MINING, ETC.**
- TUNNEL DRIVING IN COLORADO.** By H. F. Bain. Min. & Sci. Press, vol. 99, p. 743. 9½ columns. I.
- LOADING BLAST HOLES AND DRIVING SMALL DRIFTS.** P. C. M. & M. Soc. S. A., vol. 10, p. 152. 3 columns.
- See also **METHODS OF CHARGING AND FIRING EXPLOSIVES.**
- LEVEL DRIVING IN OIL-SHALE MINING, SCOTLAND.** T. I. M. E., vol. 36, p. 583. 2 pages. I.
- ON DRIVING ADITS AND THE MODE IN PRACTICE OF TIMBERING MINES.** By W. Smyth. Min. Mag., vol. 9, p. 328. 4 pages.
- DRIVING BREASTS ON THE RAND.** P. C. M. & M. Soc. S. A., vol. 10, p. 280. 2 columns. I.
- DRIVING A 7-FOOT ENTRY: Coal Mining.** E. & M. J., vol. 86, p. 7. ½ column. I.
- DRIVING BUTT-ENTRIES.** E. & M. J., vol. 86, p. 17. 1 column.
- DRIVING HEADINGS IN ROCK TUNNELS.** By W. L. Saunders. T. A. I. M. E., vol. 40, p. 432. 27 pages. I.
- See also **DRAINAGE TUNNELS and COST OF TUNNELING.**

Examples of Tunnels

- ARRANGEMENT OF HOLES IN DRIVING THE ROOSEVELT TUNNEL.** M. & M., vol. 29, p. 388. I.
- FAST TUNNEL DRIVING.** E. & M. J., vol. 86, p. 1199. ½ column.

- FAST TUNNEL DRIVING. M. & M., vol. 31, p. 9. 1 column. I.
- FAST DRIFT WORK ON THE RAND. E. & M. J., vol. 87, p. 495. 1½ columns.
- FAST DRIVING AT THE GOLDFIELD CONSOLIDATED MINES. By C. T. Rice. E. & M. J., vol. 90, p. 1246. 3½ columns.
- FAST TUNNEL DRIVING. Min. & Sci. Press, vol. 100, p. 896. 1 column.
- RECORD DRIVING IN THE RAND DEEP LEVELS. By E. M. Weston. E. & M. J., vol. 85, p. 1257. ½ column.
- RECORD IN DRIVING DRIFT IN SOUTH AFRICA. Min. & Sci. Press, vol. 97, p. 19. ½ column.
- TUNNEL DRIVING RECORDS. By R. L. Herrick. M. & M., vol. 29, p. 422. 8½ columns.
- AMERICAN RECORD IN TUNNEL DRIVING. E. & M. J., vol. 89, p. 1311. 1½ columns.
- A WORLD'S RECORD IN TUNNEL DRIVING: The Los Angeles Aqueduct. By B. A. Keinly. Min. & Sci. Press, vol. 99, p. 589. 3 columns. I.
- ROOSEVELT TUNNEL, CRIPPLE CREEK. By R. L. Herrick. M. & M., vol. 29, p. 387. 9½ columns. I.
- DRILLING IN THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 388. 1½ columns. I.
- See also MACHINE OR POWER DRILLS.
- UTAH METAL COMPANY TUNNEL. By L. A. Palmer. M. & M., vol. 31, p. 296. 2½ columns. I.
- TUNNEL OF THE UTAH METAL MINING COMPANY. E. & M. J., vol. 89, p. 1269. 1½ columns.
- TUNNELING ON LOS ANGELES AQUEDUCT. By R. L. Herrick. M. & M., vol. 31, p. 135. 16½ columns. I.
- THE ELIZABETH TUNNEL. By W. C. Aston. M. & M., vol. 31, p. 102. 6 columns. I.
- HOLYWELL-HALKYN TUNNEL AND MINES, HOLYWELL, NORTH WALES. By J. P. Jones. T. I. M. E., vol. 36, p. 197. 5 pages. I.
- MINING OPERATIONS IN NEW YORK CITY AND VICINITY. By H. T. Hildage. T. A. I. M. E., vol. 38, p. 360. 38 pages. I.
- TUNNELS UNDER THE CHICAGO RIVER FOR ELECTRIC CABLES. By G. B. Springer. J. W. Soc. E., vol. 13, p. 41. 30 pages. I.
- VIDLER TUNNEL, COLORADO. E. & M. J., vol. 88, p. 515. ½ column.
- THE LARAMIE TUNNEL. By R. L. Herrick. M. & M., vol. 30, p. 541. 3 columns. I.
- ALPINE AND AMERICAN TUNNEL RECORDS. Min. & Sci. Press, vol. 96, p. 781. 1 column. Table.
- See also DRAINAGE TUNNELS and COST OF TUNNELING.

Tunneling Machines

- TUNNELING MACHINES. E. & M. J., vol. 90, p. 1144. 1 column.
- TUNNELING MACHINES. T. A. I. M. E., vol. 40, p. 453. 6½ pages.
- A NEW TUNNELING MACHINE. Min. & Sci. Press, vol. 22, p. 153. 4 columns. I.
- PRACTICAL TEST OF A TUNNEL BORING MACHINE. By J. Tyssowski. E. & M. J., vol. 87, p. 1296. 4 columns. I.
- THE KARNS TUNNELING MACHINE. By R. L. Herrick. M. & M., vol. 29, p. 110. 2½ columns. I.
- TRIAL OF THE KARNS TUNNELING MACHINE. E. & M. J., vol. 87, p. 297. 1 column.

See also METHODS OF TUNNELING.

MINE VENTILATION

Methods of Ventilating Mines, Splitting Air Currents, Etc.

MINE VENTILATION. By H. J. Nelmes. E. & M. J., vol. 88, p. 782. 1½ columns. I.

MINE VENTILATION. By T. W. Fitch and J. R. McColl. M. & M., vol. 30, p. 590. 1½ columns.

MINE VENTILATION. By A. Del Mar. E. & M. J., vol. 85, p. 1043. 3½ columns.

METHOD OF VENTILATING THE LIGNITE MINES OF ITALY. E. & M. J., vol. 89, p. 1178. 2½ columns.

IMPROVED METHODS IN MINE VENTILATION. E. & M. J., vol. 86, p. 1059. 1½ columns.

THE VENTILATION OF MINES AND COLLIERIES. By J. Phillips. Min. Mag., vol. 3, p. 3, 13 pages, I.; p. 268, 13 pages; p. 377, 7 pages; vol. 4, p. 1, 16 pages; p. 257, 14 pages.

THE VENTILATION OF MINES. By J. K. Blackwell. Min. Mag., vol. 2, p. 156, 10 pages; p. 286, 3 pages.

VENTILATION OF MINES. Min. Mag., vol. 9, p. 53. 3 pages.

ON THE GASES AND VENTILATION OF MINES. Min. Mag., vol. 9, p. 316, 6 pages; p. 424, 5 pages.

DATA ON COAL MINE VENTILATION. E. & M. J., vol. 87, p. 757. 2½ columns.

VENTILATING SYSTEM AT THE COMSTOCK MINES, NEVADA. By G. J. Young. T. A. I. M. E., vol. 41, p. 3. 55 pages. I.

METAL MINE VENTILATION. By E. W. Buskett. M. & M., vol. 31, p. 19. ½ column. I.

METAL MINE VENTILATION. M. & M., vol. 31, p. 337. 3½ columns.

METAL MINE VENTILATION. M. & M., vol. 30, p. 662. 3½ columns.

MINE VENTILATION: Water-jet and Air-jet Systems. E. & M. J., vol. 89, p. 1189. 1 column. I.

NECESSITY FOR ATTENTION TO VENTILATION AND SANITATION OF MINES. P. C. M. & M. Soc. S. A., vol. 6, p. 256. 5 columns.

VENTILATION SYSTEM AT THE COMSTOCK MINES. By G. J. Young. E. & M. J., vol. 88, p. 1016. 9 columns. I.

THE COOLING OF MINES. By B. A. Smith. T. A. I. M. E., vol. 12, p. 63. 6 pages.

THE VENTILATION OF FACTORIES. P. C. M. & M. Soc. S. A., vol. 9, p. 136. 3½ columns.

THE ECONOMY OF MODERN COLLIERY VENTILATION. By J. R. Robinson. E. & M. J., vol. 85, p. 1010. 12 columns.

See also **COST OF VENTILATION.**

Mechanical Ventilators: Fans, Their Construction and Use

UNDERGROUND VENTILATORS IN THE COMSTOCK MINES. Min. & Sci. Press, vol. 100, p. 419. ¼ column.

AIR CONDITIONING APPARATUS: Preparing Air for Various Uses. By W. H. Carrier. P. E. Soc. W. Pa., vol. 26, p. 203. 30 pages. I.

MINE VENTILATING FANS. By J. R. McColl. M. & M., vol. 30, p. 729. 2½ columns. I.

PROPORTIONING FANS TO MINES. By T. W. Finch and J. R. McColl. M. & M., vol. 30, p. 700. 3½ columns. I.

PRESSURE-FANS vs. EXHAUST-FANS. By A. H. Stow. T. A. I. M. E., vol. 40, p. 398, 14½ pages; Discussion, p. 874, 4½ pages.

DETAILED CONSTRUCTION OF HIGH-SPEED FAN FOR LARGE VEIN. E. & M. J., vol. 89, p. 428. I.

A NEW MINE FAN: Jeffrey Centrifugal Fan. E. & M. J., vol. 85, p. 369. 1 column. I.

A NEW VENTILATING FAN FOR MINES. By M. C. Mitchell. M. & M., vol. 30, p. 221. 2½ columns. I.

THE SQUIRREL CAGE FAN FOR MINE VENTILATION. E. & M. J., vol. 89, p. 674. 2 columns. I.

WIDTH OF FAN BLADE. M. & M., July, 1902, p. 569.

BENEFITS OF AN AUXILIARY FAN. By H. M. McAlarney and W. H. Kephart. M. & M., vol. 29, p. 354. 1½ columns. I.

THE ROTARY BLOWER IN SMELTING WORKS. By G. C. Hicks, Jr. E. & M. J., vol. 87, p. 352. 10½ columns. I.

See also **METHODS OF VENTILATING MINES and COST OF VENTILATION.**

Effect of Size and Shape of Air Ways in Ventilation, Etc.

See first volume of INDEX.

Quantity of Air Needed in Mines

NEED OF THOROUGH VENTILATION IN COAL MINES. By J. R. Robinson. E. & M. J., vol. 85, p. 963. 4½ columns.

MINE VENTILATION: Quantity of Air Necessary, Report. P. C. M. & M. Soc. S. A., vol. 7, p. 85. 1 column.

NOTE ON THE DAILY VARIATION OF RAND MINE VENTILATION. By J. Moir. P. C. M. & M. Soc. S. A., vol. 8, p. 138, 5½ columns; p. 278, 4½ columns.

See also first volume of INDEX.

Stoppings, Doors, Overcasts and Regulators in Mines

SELF-OPERATED MINE DOOR. E. & M. J., vol. 85, p. 1154. 1 column. I.

THE POCAHONTAS AUTOMATIC MINE DOOR. By A. H. Stow. E. & M. J., vol. 86, p. 862. 1½ columns. I.

SELF-ACTING MINE DOORS. E. & M. J., vol. 88, p. 1237. 1 column. I.

EXTRA MINE DOORS. M. & M., vol. 31, p. 216. ½ column. I.

LATH STOPPINGS FOR COAL MINES. E. & M. J., vol. 90, p. 872. ½ column. I.

VENTILATING CURRENTS AND STOPPINGS. By J. Duncan. M. & M., vol. 30, p. 691. ½ column.

AIR-TIGHT STOPPINGS FOR USE DURING UNDERGROUND FIRES. By R. V. Spier. T. Au. I. M. E., vol. 13, p. 138. 3½ pages. I.

See also **MINE FIRES.**

OVERCASTS IN COAL MINES. E. & M. J., vol. 86, p. 1106. ½ column. I.

See also **COST OF VENTILATION.**

Measurement of Air Currents

MEASUREMENT OF VENTILATING CURRENTS IN THE COMSTOCK MINES, NEVADA. T. A. I. M. E., vol. 41, p. 40. 2 pages.

See also first volume of INDEX.

Tests on Fans

METHOD OF TESTING A FAN. E. & M. J., vol. 85, p. 1013. 1½ columns.

TEST OF A WADDLE FAN. By G. L. Kerr. M. & M., vol. 30, p. 294. 4½ columns. I.

MINE FAN TESTS. P. C. M. & M. Soc. S. A., vol. 7, p. 306. 1 column.

See also first volume of INDEX.

Efficiency of Fans

See first volume of INDEX.

Application of Ventilating Methods to Metal and Coal Mines

VENTILATION AT BENDIGO, AUSTRALIA. Min. & Sci. Press, vol. 93, p. 601. ½ column.

VENTILATION IN DEEP MINES. Min. & Sci. Press, vol. 93, p. 629. 2 columns.

See first volume of INDEX.

WATER

Source and Supply of Water

AMOUNT OF FREE WATER IN THE EARTH'S CRUST. M. & M., vol. 29, p. 539. $\frac{1}{2}$ column.

VOLCANIC WATERS. By J. H. Hastings. Min. & Sci. Press, vol. 97, p. 229. 6 columns.

See also **AIR-BLASTS, VOLCANOES, AND EARTHQUAKES.**

WATERS, METEORIC AND MAGMATIC. By J. F. Kemp. Min. & Sci. Press, vol. 96, p. 705, $6\frac{1}{2}$ columns; p. 872, $6\frac{1}{2}$ columns, I.

UNDERGROUND WATERS AND SEMI-ARID REGIONS. By W. C. Mendenhall. Min. & Sci. Press, vol. 99, p. 496. 1 column.

RATIO OF MINE WATER TO RAINFALL. M. & M., vol. 29, p. 248. $\frac{1}{2}$ column.

PRINCIPLES AND CONDITIONS OF THE MOVEMENTS OF GROUND WATER. By F. H. King. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 59-294. 1897-98. I.

THEORETICAL INVESTIGATION OF MOTION OF GROUND WATERS. By C. S. Slichter. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 295-384. 1897-98. I.

See also **THEORY OF ORE DEPOSITS, ETC.**

WATER SUPPLY FOR KALGOORLIE. By M. W. Von Bernwitz. Min. & Sci. Press, vol. 96, p. 709. $2\frac{1}{2}$ columns.

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Coll. Engr. & Met. Miner	8-13	{ Miner and M. & M.
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Min. Mag. (old series)...	1-10	Discontinued
Min. Mag. (new series) ..	11-13	Discontinued
Min. Mag., London.....	1-4	
M. & M.....	18-28	29-31	Formerly Coll. Engr.
Min. & Sci. Press.....	{ 13-94 except 15, 20, 22 and 24 }	{ 95-101 also 20 and 22 }	
P. C. M. & M. Soc. S. A.	5-6	7-10	See J. C. & M. Soc. S. A.
P. E. Soc. W. Pa.....	{ 1-22 except 2 and 3 }	{ 23-26 also 2 and 3 }	{ For mining subjects only
P. Soc. P. E. E.....	1-10	11-17	
Sch. Mines Quart.....	1-28	29-31	
T. A. I. M. E.....	1-37	38-41	
T. Au. I. M. E.....	1-13	
T. I. M. E.....	1-35	36-39	{ Was formerly called the T. F. I. M. E.
T. I. M. & M.....	1-16	17-19	
T. L. S. M. I.	1-12	13-15	
T. N. S. I. M. & M. E. ..	1-10	
T. F. C. M. I.....	1-6	{ Not available for indexing
U. S. G. S. Publication..	{ Partially indexed }	{ Completed to Jan. 1, 1911 }	{ Water supply papers not indexed }

INDEX

It has been found impracticable to index all subjects considered in the references given in this work, but it is hoped that the present index will prove to be amply exhaustive to give ready access to any desired information.

Under Districts the countries, states, etc., as well as the various materials are grouped in alphabetical order, and similarly under Geology and Ore Deposits, which is evident on careful examination, although it is not always indicated by the subheadings.

- Abandoned mines, 387, 388.
- Accidents in mining, 1.
 - avalanches, 17.
 - cause of accidents, 2.
 - chambers of refuge, 12.
 - coal dust, 8.
 - compensation, 6.
 - costs of, 50.
 - earth and snow slides, 17.
 - fall of roof and walls, 7.
 - first aid to injured, 7.
 - health of miners, 304.
 - hoisting accidents, 17.
 - inundation of mines, 8.
 - lightning entering mines, 17.
 - loss of life in mining, 1.
 - mine explosions, 14, 17.
 - mine fires, 12.
 - poisoning and injuries, 17.
 - powder explosions, 17.
 - protection in mines, 3.
 - rescue work in mines, 4.
 - spontaneous combustion, 4.
- Accounts, 310.
- Acetylene gas, 359.
- Acid manufacture, 23.
- Acts, land, 356.
- Administration, 308.
- Africa, see Districts.
- Air blasts, 233.
 - compressors, 28.
 - compressed, 28, 297.
 - hammer drills, 184.
 - quantity needed, 420.
- Air-currents, measurement of, 420.
 - splitting, 419.
- Alabama, see Districts.
- Alaska, 218; see Districts.
- Alloys of iron, 345.
- Aluminum, 289, 345.
- Amalgamation, 34, 35, 36.
- Amber, 349.
- Amortization, 311.
- Analysis, mineral, 23.
 - coal, 26.
 - electrolytic, 27.
 - gold and silver, 24.
 - in cyaniding, 25.
- Animals in mines, 18.
 - haulage, 296.
 - mine stables, 18.
- Antimony, 240.
 - determination of, 24.
- Apatite, see Geology.
- Apex law, 357.
- Apparatus employed in sampling, 407.
 - for boring, 188.
- Appliances for hoisting, 299.
- Application of mining law, 355.
 - of power, 396.
 - ventilation methods, 420.
- Apprenticeships, 306.
- Argentine Republic, see Districts.
- Arizona, see Districts.
- Arkansas, see Districts.
- Arrangement of holes in blasting, 20.
- Arsenic, 240.
 - determination of, 24.
- Asbestos, 240, 349.
- Asia, see Districts.
- Asphalts, 240.
- Asphaltum compounds, 349.

- Assaying, 315.
- Assessments of claims, 357.
- At the face, machinery, 694.
- Atmosphere of mines, 352.
- Auriferous gravels.
- Australia, 218; see Districts.
- Austro-Hungary, see Districts.
- Avalanches, 17.

- Bailing water, 182.
 - costs of, 98.
- Ball mills, 404.
- Barometric pressure, 354.
- Barites, 241.
- Barrier pillars, 392.
- Bauxite, see Geology.
- Beach mining, 380.
- Bearings for machinery, 388.
- Belgium, see Districts.
- Belts, 388.
- Bessemerizing copper matte, 323.
- Bismuth, 241.
 - determination of, 22.
- Blasting in mines, 18.
 - arrangement of holes, 20.
 - charging, 19.
 - compressed air in blasting, 20.
 - costs of, 50, 60.
 - firing, 19.
 - in coal mines, 19.
 - in metal mines, 19.
 - large or mammoth blasts, 20.
 - lime blasting, 20.
 - methods of blasting, .
 - quantity of explosive, 20.
 - submarine blasting, 20.
 - tamping and materials, 20.
- Blowers of gas, 354.
- Blue-printing, 202.
- Bog houses, 342.
- Boilers, 396.
 - calculation of, 397.
 - compounds for, 398.
 - explosions of, 17.
 - feed-water, 397.
 - heaters, 398.
 - horse-power of, 397.
 - steam, 396.
 - tests, 397.
- Bolivia, see Districts.
- Book-keeping, 310.
- Borax, 241; see Geology.

- Bore holes, 185.
 - surveying, 188.
- Boring, 183.
- Brakes for hoisting, 301.
- Brazil, see Districts.
- Breakage of ropes, 406.
- Breaking coal at face, 373.
- Brick, 30.
- Briquetting of fuels, 213.
- British Columbia, 218; see Districts
- Bucket dumps, 194.
- Buckets for hoisting, 301.
- Building stone, 241.
- Buildings, mine and mill, 350.
- Buying coal, 211.
 - ore, 310.
- Bureau of mines, 360.

- Cable ways, construction and use, 416.
- Cage keeps or chairs, 302.
- Cages for hoisting, 194, 301.
- Calculations, metallurgical, 315.
 - for hoisting, 299.
- California, 219.
- Camping outfits, 363.
- Canada, 219; see Districts.
- Canals, 416.
- Candles, 359.
- Capacity of mine cars, 415.
- Carborundum, 349.
- Care of rope, 406.
- Carolinas, see Districts.
- Cars, capacity of, 297, 415.
- Cause of accidents, 2.
- Caverns, 233.
- Caving system of mining, 375.
- Cement, properties of, 46.
- Cement rocks, 242.
- Cementation, 393.
- Central America, see Districts.
- Central power plant, 398.
- Centrifugal concentration, 78.
- Chains, 302.
- Chairs for cages, 302.
- Chambers of refuge, 12.
- Changing houses, 307.
- Charging in blasting, 19.
- Characteristics of coal, 209.
- Chemistry, 20.
 - acid manufacture, 23.
 - antimony, determination of, 24.
 - arsenic, determination of, 24.

- Chemistry: bismuth, determination of, 20.
- coal analysis, 26.
- cobalt, determination of, 26.
- copper, methods of analysis, 26.
- costs of, 52.
- cyaniding, chemical analysis in, 25.
- electrolytic analysis, 27.
- general, 20.
- gold analysis, 24.
- iron, methods of determining, 27.
- lead, determination of, 25.
- lime analysis, 41.
- manganese, determination of, 38.
- mercury, determination of, 20.
- mineral analysis, 23.
- molybdenum, determination of, 20.
- nickel, determination of, 26.
- paint manufacture, 24.
- silver analysis, 24.
- sulphur, determination of, 24.
- tellurium, determination of, 20.
- tin, determination of, 26.
- tungsten, determination of, 26.
- wolfram, determination of, 20.
- zinc, determination of, 25.
- Chile, see Districts.
- Chili, see Districts.
- Chimneys, 342.
- China, see Districts.
- Chlorination process, 334.
- costs of, 53.
- Churn drills and drillings, 186.
- Chutes, 294.
- Claims, mining, 357, 413.
- Classification of minerals, 39.
- Classifiers, 39.
- Clays, 29, 242.
- brick, 30.
- methods of testing, 29.
- products, 30.
- properties of, 29.
- uses of, 29.
- Clips, rope, 298.
- Clubs, miners', 307.
- Coal, 30, 243.
- analysis, 26.
- composition, 209.
- costs of coal mining, 82.
- costs of metal mining, 85.
- decomposition, 209.
- dust, 8.
- Coal: for mine support, 391.
- practice in sampling, 408.
- preparation of, 30.
- storing, 295.
- trade, 192.
- washing, 38.
- weighing, 275.
- Cobalt, determination of, 26.
- Codes for signaling, 411.
- Coke, 210.
- Colombia, 155; see Districts.
- Colorado, 219; see Districts.
- Compensation to miners, 6.
- Composition of coal, 209.
- Compressed air, 28.
- compression of air, 29.
- compressors, 28.
- diseases, 29.
- explosions in compressors, 29.
- for signaling, 411.
- haulage, 29, 297.
- hydraulic compressors, 29.
- in blasting, 20.
- operations, 28.
- pumping, 181.
- regulators, 28, 29.
- transmission of power by, 401.
- types of compressors, 28.
- Compression of air, 28.
- Concentration, 30.
- amalgamation of gold, 34.
- amalgamators, 34.
- buddles, 37.
- classifiers, 39.
- concentrators, 37.
- costs of, 81, 88.
- disposal of waste, 39.
- dry concentration, 41.
- electrostatic separation, 36.
- flotation processes, 33.
- flow sheets, 34.
- gold amalgamation, 34.
- hand dressing, 33.
- hand tests, 39.
- jigs and jigging, 32.
- launders and distributors, 32.
- magnetic separation, 36.
- mercury and amalgamation, 34.
- pan amalgamation, 36.
- patio amalgamation, 36.
- plates in amalgamation, 35.
- practice in milling, 42, 88.

- Concentration: preparation of coal, 30.
 salt making, 42.
 sand treatment, 41.
 silver amalgamation, 34.
 slime treatment, 40.
 sorting, 33.
 tables, 37.
 testing plants and laboratories, 31.
 theory of concentration, 31.
 washing coal and mineral, 38.
- Concentrators, 37.
- Concrete, 46.
 characteristics of, 46.
 manufacture of, 46.
 mortars and plasters, 46.
 properties of, 46.
 use of, in mines, 47.
 uses of, 46.
- Condensers, 398.
- Conditions affecting support, 699.
- Connecticut, see Districts.
- Conservation, 190.
- Construction of dams, 116.
- Consumption of coal, 398.
 of steam, 398.
- Contract systems, 307.
- Conveyors for mineral and coal, 49.
 costs of, 92.
 kinds of, 49.
 loading and unloading for vessels
 and cars, 49.
 operation of, 49.
 underground, 49.
- Copper, 34, 346; see Geology.
 determination of, 26.
 metallurgy of, 318.
- Copper trade, 191.
- Cornish pumps, 181.
- Correspondence schools, 200.
- Corundum, 349.
- Cost of various operations, 49.
 bailing, 98.
 blasting, 50, 60.
 charges, 100.
 chemistry, 52.
 chlorination, 53.
 coal mining, 82.
 conveyors, 92.
 cyaniding, 50.
 dams, 54.
 depreciation, 70.
 development, 53.
- Cost of various operations: drainage, 54.
 dredging, 54.
 drilling and boring, 55.
 elevators, 92.
 excavating, 59.
 explosives, 60.
 flume and ditch construction, 61.
 fuel, 61.
 handling, 63.
 haulage, 63.
 hoisting, 66.
 hydraulic mining, 67.
 keeping, cost, 67.
 labor, 67.
 lighting, 70.
 maintenance, 70.
 metal mining, 85.
 metallurgical treatment, 70, 81.
 milling, 81, 88.
 mine examination, 74.
 mine and mill construction, 74.
 mining, 76, 82, 85.
 ores and minerals, 92.
 packing, 93.
 pipes and pipe laying, 93.
 portage, 93.
 power, 93.
 preserving timber, 98.
 production, 97.
 prospecting, 98.
 pumping, 98.
 reduction, 99.
 rope, 100.
 royalties, 100.
 sampling, 101.
 shaft sinking, 101.
 signaling, 103.
 sizing, 103.
 sorting, 103.
 stopping, 103.
 storing, 63.
 stripping, 104.
 supplies, 104.
 support, 104.
 surveying, 107.
 tramming, 107.
 tramways, 107.
 transportation, 108.
 tunneling, 112.
 ventilation, 115.
 washing coal and ores, 115.
- Counterbalancing in hoisting, 300.

- Countries, maps of, 312.**
 laws of, 355.
Couplings, 298.
Cradles, 194.
Cross-heads, 302.
Crushers, 402.
 construction of, 402.
 operation of, 402.
Cryolite, see Geology.
Culm, use of, 379.
Cyanide poisoning, 17.
Cyaniding, 325.
 chemical analysis in, 42.
 costs of, 50.
 plants, 334.
- Damages from debris, 387.**
Dams for mining purposes, 116.
 construction of, 116.
 costs of, 54.
 description of, 116.
 stability of, 116.
 stresses in, 116.
 underground, 117.
Débris, mining, 387.
Decisions, 358.
Deep drilling, 187.
 mining, 380.
 winding, 300.
- Deposits of ore and fuel, 215.**
 alum and aluminum, 142, 239.
 amber, *see* Geology.
 antimony, 129, 240.
 apatite, *see* Canada.
 arsenic, 163, 240.
 asbestos, 177, 240.
 asphalts, 174, 176, 240.
 barites, 147, 175, 176.
 bismuth, 241.
 borax, 135, 172.
 building stone, 118, 128, 168, 172.
 cement rocks, 158, 170, 175, 177.
 clays, 117, 122, 129, 147, 149, 151, 164, 166, 170.
 coal, 117, 120, 125, 130, 131, 135, 138, 141, 142, 143, 147, 148, 149, 150, 157, 161, 163, 165, 166, 168, 170, 171, 172, 174, 175, 176, 177.
 copper, 117, 120, 125, 128, 131, 142, 147, 148, 150, 158, 161, 169, 172, 174, 176, 177, 178.
 diamonds, 117, 120, 130, 133, 135, 172.
- Deposits of ore and fuel: diatomaceous earth, 258.**
 emeralds, 282.
 fluorspar, 118, 151.
 fuller's earth, 118.
 gas, 118, 119, 177.
 glass sands, 118, 172, 177.
 gold and silver, 120, 126, 128, 131, 133, 135, 138, 141, 143, 144, 145, 146, 147, 152, 158, 159, 162, 164, 165, 168, 170, 176, 178.
 graphite, 151, 172, 178.
 gypsum, 136, 158, 164, 178.
 iron, 118, 122, 127, 136, 139, 153, 163, 164, 167, 170, 171, 174, 176, 177, 179.
 lead, 119, 145, 149, 151, 156, 171, 173, 175, 177.
 lignites, 146.
 manganese, 119, 133, 149, 169, 173, 175.
 mica, 179.
 monazite, 141.
 nickel, 166.
 nitrates, 239.
 ocher, 282.
 onyx, 282.
 peat, 127, 157, 173.
 petroleum, 119, 128, 132, 133, 137, 165, 169, 175, 177, 179.
 phosphates, 119, 132, 133, 171, 173, 175.
 platinum, 169, 179.
 quicksilver, 119, 130, 137, 170, 171.
 rare earths, 117, 171.
 rare metals, 117, 118.
 ruby, 282.
 salt, 133, 175, 179.
 sapphires, 282.
 silver, 140, 148, 154, 160, 162, 171, 173.
 slate, 147, 163, 173, 175.
 sulphur, 119, 156, 178, 179.
 theory of ore deposits, 234.
 tin, 119, 122, 128, 132, 133, 142, 166, 170, 172.
 tungsten, 120, 129, 138, 141, 145, 161.
 turquoise, 282.
 vanadium, 118, 168.
 wolframite, 293.
 zinc, 119, 133, 156, 161, 165.
- Depreciation of plants, etc., 311.**
 costs of, 70.

- Descriptions of dams, 116.
- Design of mine cars, 297.
 - of constructions, 349.
- Detection of mine gases, 354.
- Determination of gas, 354.
 - of minerals, 346.
- Detonators, 207.
- Development of mining industry, 188.
 - coal trade, 192.
 - conservation, 190.
 - copper trade, 191.
 - costs of, 53.
 - economic features of mining, 188.
 - explosives, 206.
 - function of gold and silver, 190.
 - industrial features of mining, 188.
 - iron trade, 192.
 - mining, 189, 365.
 - mining statistics, 189.
 - miscellaneous production, 193.
 - precious metal mining, 189.
 - production of gold and silver, 189.
- Diamond drills, 187.
- Diamonds, 349; see Geology.
 - origin of, 349.
- Diatomaceous earth, 258.
- Difficulties in mining, 387.
- Dimensions of rooms, 373.
 - of shafts and slopes, 365.
- Discipline in mines, 306.
- Diseases, 304.
- Districts, mining, 117, 217.
 - Africa, 120, 244, 253, 257, 259, 273, 291.
 - Alabama, 122, 244, 273.
 - Alaska, 123, 218, 244, 253, 260, 283, 291.
 - Argentine Republic, 128.
 - Arizona, 128, 253, 262, 288, 292.
 - Arkansas, 129, 257, 278, 286.
 - Asia, 130.
 - Australia, 130, 244, 254, 262, 273, 283, 291.
 - Austria-Hungary, 133.
 - Belgium, 133.
 - Bolivia, 133, 271, 291.
 - Brazil, 133, 258, 273.
 - British Columbia, 134, 244, 254, 263, 274, 286, 288.
 - Burma, 284.
 - California, 135, 219, 245, 254, 258, 263, 274, 284, 292.
 - Canada, 138, 219, 245, 264, 274, 288, 292.
 - Carolinas, 141, 245, 291.
 - Central America, 141.
 - channels, 182.
 - Chile, 141, 255.
 - China, 142, 245, 277, 289, 291.
 - Colombia, 142, 245, 265.
 - Colorado, 143, 245, 255, 266, 275, 277, 284, 292.
 - Connecticut, 145.
 - Dakotas, 146.
 - Delaware, 146.
 - East Indies, 146.
 - Ecuador, see Districts.
 - Egypt, 146; see Districts.
 - England, 145, 266, 275, 277, 292.
 - Florida, 147, 286.
 - France, 147, 266.
 - Georgia, 147, 255, 267.
 - Germany, 148.
 - Greece, see Districts.
 - Guianas, 142, 265.
 - Honduras, see Districts.
 - Idaho, 148, 219, 292.
 - Illinois, 148, 246, 284.
 - India, 149; see Districts.
 - Indiana, 149, 247, 284.
 - Iowa, 149; see Districts.
 - Jamaica, 150, 219.
 - Japan, 150.
 - Kansas, 150, 220.
 - Kentucky, 150, 247.
 - Korea, 267.
 - Lapland, see Districts.
 - Louisiana, 151, 284, 288.
 - Madagascar, see Districts.
 - Maine, 151, 220.
 - Malaysia, 146, 292.
 - maps of, 312.
 - Maryland, 151, 220.
 - Massachusetts, 151, 220.
 - Mexico, 151, 247, 255, 267, 275, 277, 278, 284, 288, 289.
 - Michigan, 156, 255, 275.
 - Minnesota, 156.
 - Miscellaneous, 117.
 - Mississippi, 156, 220.
 - Missouri, 156, 220, 247, 278.
 - Montana, 157, 221, 247, 268.
 - Nebraska, 158.
 - New Caledonia, 161.

- Districts, mining:** Nevada, 158, 256, 268, 275, 278, 285, 286, 290.
 Newfoundland, 161.
 New Hampshire, 161.
 New Hebrides, 161.
 New Jersey, 161, 275.
 New Mexico, 161, 221, 249, 256, 269, 275, 277.
 New York, 163, 221, 275.
 New Zealand, 163, 218, 270.
 Nicaragua, 163, 270.
 North Dakota, 246.
 Norway, see Districts.
 Nova Scotia, 164, 270, 293.
 Ohio, 165.
 Oklahoma, 165, 249, 270.
 Oregon, 165, 221, 249, 270, 285.
 Panama, 166.
 Pennsylvania, 166, 221, 249, 276, 285.
 Persia, 219.
 Peru, 168, 271, 292.
 Philippine Islands, 168, 250, 271.
 Portugal, 169.
 Rhode Island, 169.
 Russia, 169, 271.
 Scandinavia, see Districts.
 South America, 245.
 South Carolina, 245.
 South Dakota, 146, 266, 291, 292.
 Spain, 170; see Districts.
 Sweden, 170.
 Tasmania, 170.
 Tennessee, 170, 250, 271, 276, 286.
 Texas, 171, 221, 290.
 Turkey, 171, 250, 271.
 United States, 171, 250, 286, 291.
 Utah, 174, 256, 271, 276, 285, 291.
 Venezuela, 175, 291.
 Vermont, 175; see Districts.
 Virginia, 175, 222, 276, 278.
 Washington, 175, 221, 251, 271, 292.
 West Indies, 176, 257, 277.
 West Virginia, 176, 251.
 Wisconsin, 177, 257, 277, 278.
 Wyoming, 177, 222, 247, 251, 257, 277, 285, 288.
- Ditches,** 182.
 costs of, 61.
- Divining,** 364.
- Doors,** 420.
- Drainage, mine:** bailing water, 182.
 compressed air pumping, 181.
 Cornish pumps, 181.
 costs of, 54.
 ditches, 182.
 electrically-driven pump, 181.
 hand pumps, 181.
 hydraulic pumps, 181.
 in general, 179.
 miscellaneous, 179.
 pipes and pipe fittings, 182.
 pump tests, 180.
 pumps for mine use, 180.
 rotary pumps, 180.
 sinking pumps, 181.
 siphons in mines, 181.
 sumps, 182.
 theory of pumping, 180.
 tunnels, 182.
 unwatering shafts, 182.
 vacuum pumps, 181.
 valves and valve-gear, 182.
 water portage, 181.
 water rings, 180.
- Drawing,** 202.
- Drawing pillars,** 372.
- Dredging,** 385.
 costs of, 54.
- Drift mining,** 376.
- Drilling and boring,** 183, 185.
 air hammer drills, 184.
 churn drills and drilling, 186.
 costs of, 55.
 deep drilling, 187.
 diamond drills, 187.
 electric drills, 184.
 forming drills, 184.
 hand drills, 183.
 machine drills, 183.
 power drills, 183.
 prospect drilling, 185.
 rate of drilling, 187.
 reamers for boring apparatus, 188.
 records, 185.
 rotary drills, 187.
 submarine drilling, 188.
 surveying bore holes, 188.
 tempering drills, 184.
 use of bore holes, 185.
- Drums for hoisting,** 298, 301.
- Dry concentration,** 41.
- Dumping devices,** 194.

- Dumping devices: bucket dumps, 194.
 cages, 194.
 cradles, 194.
 dumps, 194.
 methods, 301.
 rotary dumps, 194.
 self-dumping cages, 194.
 skip dumps, 194.
 tipples, 194.
 Dust as an explosive, 8.
- Earth and snow slides, 17.
- Earthquakes, 233.
- East Indies, *see* Districts.
- Ecuador, *see* Districts.
- Education, 195.
 bibliographies, 195.
 blue-printing, 202.
 correspondence schools, 200.
 definitions and terms, 202.
 drawing, 202.
 engineering, 199.
 experimentation, 202.
 exhibitions, 201.
 indexes, 195.
 industrial, 205.
 laboratories, 203.
 measures, 202.
 mining, 198.
 mining institutes, 200.
 notes, 203.
 models, 203.
 periodicals, 201.
 practices, 201.
 requirements, 204.
 research, 202.
 scope of, 199.
 societies, 201.
 summer schools, 202.
 symbols, 203.
 technical, 199.
 terms, 202.
 textbooks, 195.
 theory, 201.
 trade schools, 200.
 weights, 202.
- Efficiency of fans, 420.
- Egypt, *see* Districts.
- Electric coal cutters, 389.
 drills, 184.
 hoisting, 299.
- Electric power plant, 399.
- Electrical haulage, 297.
 pumping, 181.
- Electrically-driven pumps, 181.
- Electricity for lighting mines, 359.
 for signaling, 411.
 in the mine, 389.
- Electro-metallurgy, 324.
 of iron, 339.
 of steel, 339.
- Electrostatic separation, 36.
- Elevators, 295.
- Emeralds, *see* Geology.
- Engineer, 309.
- England, *see* Districts.
- Entries in mines, *see* Development.
- Equipment of electric plants, 399.
 of mines, 363.
- Estimation of value of mines, 647.
- Ethics, 309.
- Examination of rope, 406.
 cost of, 74.
 of mines, .
- Examples of tunneling, 417.
- Excavation of earth, 381.
 costs of, 59.
- Explosions, mine, 14, 17.
 in air compressors, 28.
- Explosives for mining purposes, 206.
 burning, 353.
 costs of, 60.
 detonators, 207.
 development of, 206.
 firing of, 19.
 fuses, 207.
 handling of, 208.
 in coal mining, 207.
 kinds of, 206.
 manufacture of, 206.
 primers, 207.
 properties of, 206.
 quantity of, 20, 208.
 regulations for cities, 206.
 safety, 206.
 storing of, 208.
 testing of, 208.
 thawing, 209.
 theory of, 206.
 use in gas and oil wells, 207.
- Expositions, 201.
- Extra-lateral rights, 357.

- Fall of roof and walls, 7.
- Fans, construction and use, 419.
 - tests on, 420.
- Faults, 233.
- Federal mining laws, 356.
- Feeders, automatic, 402.
- Fiber ropes, 406.
- Filing card systems, 311.
- Fine crushing, 404.
- Fineness of gold, 346.
- Fires, mine, 12.
- Firing explosives, 19.
- First aid, 7.
- Florida, see Districts.
- Flotation processes, 33.
- Flow sheets, 34.
- Flue dust, 342.
- Flushing, 379.
- Flume, 342.
- Flumes, 352.
 - costs of, 61.
- Fluming, 414.
- Fluorspar, see Geology.
- Formations, 216.
- Forming drills, 184.
- Fossils, 226.
- Foundations, 351.
- France, see Districts.
- Frauds, 312.
- Friction brakes, 389.
 - clutches, 389.
- Fuels and fuel testing, 209.
 - briquetting, 213.
 - buying coal, 211.
 - characteristics of coal, 209.
 - coke, 210.
 - composition of coal, 209.
 - costs of, 61.
 - decomposition, 209.
 - gas as power generator, 212.
 - geology of, 224.
 - manufacture of coke, 210.
 - oil as power generator, 211.
 - peat, 210.
 - properties of coke, 210.
 - substitutes of fuel, 212.
 - testing of, 213.
 - use of gas, 212.
 - value of fuels, 213.
 - waste of coal, 398.
- Fuller's earth, see Geology.
- Function of gold and silver, 190.
- Furnaces, 342.
- Fuses, 207.
- Gas as power generator, 212.
 - engines, 300, 397.
 - in mines other than coal, 354.
- Gases, 352.
- Gasoline motors, 297.
- Gauge of cars, 415.
- Gems, 349.
- General mining, 360.
- Geological formations, 216.
- Geological maps, 313.
- Geology, 215.
 - air blasts, 233.
 - alum and aluminum, 142, 239.
 - antimony, 129, 240.
 - apatite, see Districts.
 - arsenic, 163, 240.
 - asbestos, 117.
 - asphalts, 240.
 - auriferous gravels, 272.
 - barites, 147, 175, 176, 241.
 - bismuth, 117.
 - borax, 135, 172, 244.
 - building stone, 118, 128, 168, 172, 241.
 - cement rocks, 158, 170, 175, 177, 242.
 - clays, 117, 122, 129, 147, 149, 151, 164, 166, 170, 242.
 - coal, 117, 120, 125, 130, 131, 135, 138, 141, 142, 143, 147, 148, 149, 150, 157, 161, 163, 165, 166, 168, 170, 171, 172, 174, 175, 176, 177, 209, 211, 243.
 - copper, 117, 120, 125, 128, 131, 142, 147, 148, 150, 158, 161, 169, 172, 174, 176, 177, 178, 253.
 - diamonds, 117, 120, 130, 133, 135, 172, 257.
 - diatomaceous earth, 258.
 - districts, 217.
 - earthquakes, 233.
 - emeralds, 282.
 - faults, 233.
 - feldspar, 258.
 - fluorspar, 118, 258.
 - fossils, 226.
 - fuels, 223.
 - fuller's earth, 118, 258.
 - gas, 118, 119, 177, 212, 281.

Geology: glaciers, 223.

glass sands, 118, 172, 177, 259.

gold and silver, 120, 126, 128, 131, 133, 135, 138, 141, 143, 144, 146, 147, 152, 158, 159, 162, 164, 166, 168, 170, 176, 178, 259.

graphite, 151, 172, 178, 272.

gypsum, 136, 158, 164, 178, 272.

iron, 118, 122, 127, 136, 139, 156, 163, 164, 167, 170, 171, 174, 176, 177, 179, 273.

lead, 119, 145, 149, 151, 156, 171, 173, 175, 177, 277.

lignites, 146, 243.

manganese, 119, 133, 149, 169, 173, 175, 279.

mica, 179, 281.

monazite, 141, 281.

nickel, 166, 282.

nitrates, 239.

natural bridges, 233.

ocher, 282.

onyx, 282.

origin of coal, 234.

of petroleum, 234.

peat, 127, 151, 173, 210, 282.

petroleum, 119, 128, 132, 137, 165, 169, 175, 177, 179, 211, 283.

phosphates, 119, 132, 133, 171, 173, 175, 285.

platinum, 169, 179, 286.

progress and studies, 227.

quicksilver, 119, 130, 137, 170, 171, 287.

rare earths, 117, 171.

rare metals, 117, 118, 280.

ruby, 282; see Geology.

rutile, 287.

salt, 133, 175, 179, 285.

sapphire, 282.

silver, 140, 148, 154, 160, 162, 171, 173, 288.

slate, 147, 163, 173, 175.

solutions of faults, 233.

sulphur, 119, 156, 173, 179, 288.

theory of ore deposits, 234.

tin, 119, 122, 128, 132, 133, 142, 166, 170, 172, 291.

tungsten, 120, 129, 138, 141, 145, 161, 292.

turquoise, 282.

types of veins, 232.

Geology: vanadium, 118, 168.

volcanoes, 233.

wolframite, 293.

zinc, 119, 133, 156, 161, 165, 277.

Georgia, see Districts.

Germany, see Districts.

Getters, 390.

Glaciers, 223.

Glass sands, 118, 172, 177.

making, 324.

Gob fires, see Mine fires.

Gold, 348; see Geology.

amalgamation, 34.

analysis of, 24.

and silver, 24.

fineness of, 346.

properties of, 348.

Governors for water wheels, 398.

Graphite, 349.

Gravels, auriferous, 277.

frozen, 379.

practice in sampling, 409.

Greece, see Districts.

Guianas, see Districts.

Guides for shafts, 302.

Gypsum, 136, 158, 164, 178, 272.

Hand drills, 183.

pumps, 257.

tests, 39.

Handling and storing coal and min-

eral, 293.

chutes, 294.

costs of, 63.

elevators, 295.

explosives, 208.

loading cars and boats, 294.

methods of, 472.

mucking, 293.

storage of, 295.

tramming, cost of, 107.

unloading cars and boats, 294.

weighing, 295.

Haulage in mines, 295.

animal, 296.

capacity of mine cars, 297.

clips, 298.

compressed air, 297.

costs of, 63.

couplings, 298.

design of mine cars, 297.

electrical, 297.

- Haulage in mines:** gasoline motors, 297.
 inclines, 296.
 mine car running gear, 297.
 mine car wheels, 297.
 mine cars, 297.
 mine roads, 298.
 on inclines, 296.
 sheaves, 298.
 steam locomotives, 296.
 switches, 298.
 systems, 295.
 track, 298.
 tractive force, 295.
 turnouts, 298.
 turntables, 298.
 wheelbarrows, 298.
- Head frames,** 350.
- Health of miners,** 304.
- History of mining,** 361.
- Hoisting accidents,** 17.
- Hoisting in mining,** 299.
 accidents, 17.
 appliances for, 299.
 brakes for, 301.
 buckets, 300.
 cage keeps, 302.
 cages for, 301, 302.
 calculations, 299.
 chains, 302.
 chairs, 302.
 costs of, 66.
 counterbalancing, 300.
 couplings, 302.
 cross-heads, 302.
 deep winding, 300.
 drums, 301.
 electric, 299.
 gas engines, 300.
 guides, 302.
 indicators for, 301.
 inspection of mines, 361.
 methods of, 301.
 oil, 300.
 overwinding, 300.
 pneumatic, 300.
 prevention of overwinding, 300.
 ropes, 302.
 safety catches for mine cages, 302.
 shaft-bottom layouts, 301.
 shaft-closing arrangements, 303.
 sheaves, 301.
 skips for, 301.
- Hoisting in mining:** speed of, 299.
 water power, 300.
 windlasses, 301.
 whims, 301.
- Honduras,** see Districts.
- Horse power of boilers,** 397.
 of engines, 397.
- Hydraulic air compressors,** 29.
 costs of, 67.
 elevators, 382.
 giants, 382.
 mining, 382.
 pumps, 181.
- Idaho,** 219; see Districts.
- Illinois,** see Districts.
- Illumination by safety lamps,** 358.
 of buildings, 359.
 of mines, 359.
- Inclines,** 296.
- Increase of temperature with depth,** 387.
- Indexes,** 195.
- India,** see Districts.
- Indiana,** see Districts.
- Indicators for hoisting,** 301.
- Industrial features of mining,** 188.
- Industries and education,** 205.
- Injuries, compensation for,** 6, 17.
- Inspection of mines,** 362.
- Institutes, mining,** 200.
- Instruments, surveying,** 412.
- Inundation of mines,** 8.
- Investments,** 311.
- Iowa,** see Districts.
- Ireland,** 182; see Districts.
- Iron,** 118, 122, 127, 136, 139, 156, 163, 164, 167, 170, 171, 174, 176, 177, 179, 273, 345.
 blast furnace method, 338.
 determination of, 27.
 for mine support, 391.
 metallurgy of, 335.
 ores, 349.
 trade, 192.
- Italy,** see Districts.
- Japan,** see Districts.
- Jigs and jiggling,** 32.
- Kansas,** 220; see Districts.
- Keeping mining notes,** 311.

- Kentucky, *see* Districts.
- Kinds of conveyors, 49.
 - of explosives, 206.
 - of rope for mine use, 406.
 - of screens, 410.
 - of support in mines, 390.
- Korea, *see* Districts.
- Labor in mines, 303.
 - apprenticeship, 306.
 - changing houses, 307.
 - clubs, 307.
 - contract systems, 307.
 - costs of, 67.
 - discipline in mines, 306.
 - health, 304.
 - insurance, 306.
 - labor problems, 304.
 - labor troubles, 306.
 - labor unions, 307.
 - leasing, 307.
 - ore thefts, 307.
 - problems, 303.
 - strikes, 306.
 - troubles, 306.
 - unions, 307.
 - wages, 307.
 - workmen, 304.
 - workmen's aid, 306.
 - workmen's compensation, 306.
- Laboratories, 203.
- Ladders in mines, 308.
- Lake transportation, 416.
- Land acts, 356.
- Lapland, *see* Districts.
- Large blasts, 20.
- Law, apex, 357.
 - applications, 355.
 - assessments, 357.
 - claims, 357.
 - countries, 355.
 - decisions, 358.
 - extra-lateral rights, 357.
 - federal mining laws, 355.
 - land acts, 356.
 - leases, 358.
 - locations, 357.
 - mill sites, 358.
 - mineral land acts, 357.
 - mining, 356.
 - mining royalties, 358.
 - of states and countries 355.
- Law: principles, 355.
 - riparian and water rights, 358.
 - royalties, 358.
 - taxes, 357.
 - the law of the apex, 358.
 - tunnel rights, 358.
- Lead, 349; *see* Geology.
 - determination of, 25.
 - metallurgy of, 340.
 - ores, 589.
- Leasing, 307, 358.
- Life in mines, 308.
- Lighting mines, 358.
 - acetylene gas, 359.
 - candles, 359.
 - costs of, 70.
 - electricity for, 359.
 - illumination by safety lamps, 358.
 - of buildings, 358.
 - of mines, 358.
 - safety lamps, 359.
 - shaft lighting, 359.
 - testing by safety lamps, 359.
- Lightning entering mines, 17.
- Lignites, 243.
- Lime, blasting, 20.
- Litigation, 387.
- Loading and unloading vessels and cars, 294.
 - conveyors for, 49.
- Locations, 357.
- Longwall mining, 372.
- Loss of life in mining, 1.
- Lubrication, 388.
- Machine drills, 183.
- Machinery, models of, 203.
 - mining, 388, 389.
- Machines for tunneling, 418.
- Madagascar, *see* Districts.
- Magnetic separation, 36.
 - surveys, 413.
- Maine, 220; *see* Districts.
- Malaysia, *see* Districts.
- Mammoth blasts, 20.
- Management of mines, 306.
 - accounts, 310.
 - administration, 308.
 - amortization, 311.
 - bookkeeping, 310.
 - buying ore, 310.
 - costs keeping, 49.

- Management of mines:** costs of, 70.
 depreciation, 311.
 engineer, 309.
 ethics, 309.
 filing and card system, 311.
 frauds, 312.
 investments, 311.
 keeping mining notes, 311.
 managers, 310.
 organization, 309.
 rating of mining property, 312.
 risks, 312.
 selling ore, 310.
 stock, 311.
 stockholders, 311.
 superintendents, 310.
 taxation of mining property, 312.
- Managers of mines,** 310.
- Manganese,** see *Geology*.
 methods of determining, 38.
- Manufacture of explosives,** 206.
 of coke, 210.
 of mine and mill machinery, 388.
 of rope, 406.
- Maps,** 312.
 countries, 312.
 districts, 312.
 geological, 313.
 making, 313.
 mine, 313.
- Maryland,** 220; see *Districts*.
- Masonry,** 391.
- Massachusetts,** 220; see *Districts*.
- Materials of construction,** 350.
- Measurement of ore,** 348, 409.
 of air currents, 420.
 of water, 422.
- Measures,** 202.
- Mercury,** determination of, 22.
- Metals,** 345.
 alloys of iron, 345.
 aluminum, 345.
 copper, 346.
 costs of, 92.
 fineness of gold, 346.
 gold, properties of, 346.
 iron, 345.
 mass copper, 346.
 platinum, 346.
 properties of, 346.
 quicksilver, 346.
 silver, 346.
- Metals:** tin, properties of, 346.
- Metallurgical methods,** 314.
 assaying, 315.
 bessemerizing of copper matte, 323.
 blast furnace smelting of chimneys, 342.
 bog house, 342.
 calculations, 315.
 chlorination, 334.
 cobalt, 341.
 copper, 318, 321.
 costs of, 70, 81.
 cyaniding, 375.
 plants, 334.
 dust, 342.
 electro-metallurgy 324, 339.
 of iron, 339
 furnaces, 342
 glass making, 324
 gold, 324.
 iron, 335.
 blast furnace method, 338.
 lead, 340.
 miscellaneous information, 344.
 nickel, 341.
 processes, 314.
 pyritic smelting, 322.
 of copper, 322.
 quicksilver, 341.
 refining copper, 323.
 gold and silver, 335.
 reverberatory smelting of copper, 322.
 roasting ores, 342.
 silver, 324.
 smelting gold, 325.
 smoke problem, 342.
 tin, 343.
 works, 315.
 zinc, 344.
- Meteorites,** 349.
- Methods of assaying,** 315.
 of blasting, 18.
 of dumping, 301.
 of handling mineral, 293.
 of hoisting, 299.
 of mining, 363, 369, 373, 383.
 of mine construction, 350.
 of quarrying, 382.
 of reduction, 401.
 of sampling mines, 407.

- Methods of signaling, 411.
 - of sizing, 410.
 - of stoping, 376.
 - of surveying, 412.
 - of timbering, 392.
 - of transportation, 414.
 - of tunneling, 417.
 - of ventilation, 419.
- Mexico, see Districts.
- Mica, 349.
- Michigan, see Districts.
- Milling methods, 381.
 - costs of, 88.
 - water in, 423.
- Mills, 745.
 - sites, 358.
- Mine cars, 297.
 - costs, 49.
 - equipment, 352.
 - explosions, 206.
 - fires, 12.
 - labor, 303.
 - ladders, 308.
 - maps, 313.
 - regulations, 13.
 - reports, 360.
 - roads, 298.
 - sampling, 407.
 - stables, 18.
 - support, 390.
 - tracks, 298.
 - wheels, car, 297.
- Mine and mill construction, 349.
 - buildings, 350.
 - costs of, 74.
 - design of structures, 349.
 - equipment, 352.
 - flumes, 352.
 - foundations, 351.
 - head frames, 350.
 - materials of, 350.
 - methods of, 350.
 - ore bins, 351.
 - shops, 350.
 - tanks, 352.
 - tipples, 350.
- Mine and mill machinery, 388.
 - at the face, 389.
 - bearings, 388.
 - belts, 388.
 - electric coal, 389.
 - friction brakes, 389.
- Mine and mill machinery: friction
 - clutches, 389.
 - getters, 390.
 - lubrication, 388.
 - manufacture of, 388.
 - mechanical, 390.
 - protection of structures, 389.
 - pulleys, 388.
 - use of, 388.
- Mine gases, 352.
 - atmosphere of mines, 352.
 - barometric pressure, 354.
 - blowers, 354.
 - burning of explosives, 353.
 - detection of, 354.
 - determination of, 354.
 - estimation of quantity, 355.
 - gas in mines other than coal, 354.
 - gases, 354.
 - occurrence in coal, 354.
 - outbursts of, 354.
 - testing for, 354, 359.
 - tests for, 354.
- Mineral land acts, 356.
- Minerals, 346.
 - amber, 349.
 - analysis, 23.
 - asbestos, 349.
 - asphaltum compounds, see Geology.
 - carborundum, 349.
 - classification, 346.
 - copper, 348.
 - corundum, 349.
 - determination of, 346.
 - diamonds, origin, 349.
 - gems, 349.
 - gold, 348.
 - graphite, 349.
 - iron ores, 349.
 - lead ores, 349.
 - measurement of ore, 348.
 - meteorites, 349.
 - mica, 349.
 - miscellaneous occurrence, 347.
 - nickel ores, 349.
 - phosphates, 349.
 - precious stones, 349.
 - quicksilver, 349.
 - radium, 349.
 - salt, 349.
 - sampling of, 409.
 - silver, 348.

- Minerals:** sulphur, 349.
value of ore, 347.
washing, 38.
weight of ore, 348.
zinc ores, 349.
- Mining,** 360.
abandoned mines, 387, 388.
accidents in, 1.
beach, 380.
breaking down coal at face, 373.
Bureau of Mines, 360.
camping outfits, 363.
caving system, 375.
costs of, 76, 81, 82, 85.
culm, use of, 379.
damages, 387.
débris, 387.
deep, 380.
development, 365.
difficulties, 387.
dimensions of rooms, 373.
of shafts and slopes, 365.
divining, 364.
drawing pillars, 372.
dredging, 385.
drift, 376.
education, 198.
elevators, 382.
entries in, *see* Development.
estimation of mines, 364.
examination,
excavation in, 381.
excavators in, 381.
filling in mines, 379.
frozen gravel, 379.
general, 360.
gravels, frozen, 379.
history of, 361.
hydraulic, 382.
hydraulic elevators, 382.
hydraulic giants, 382.
increase of temperature with depth,
387.
inspection, 361.
law, 355.
lighting, 358.
litigation, 387.
longwall, 372.
loss of life, 1.
methods of, 369.
coal, 369.
milling methods, 381.
- Mining:** mine reports, 360.
miscellaneous, 373.
models, 203.
open-cut, 381.
ore reserves, 364.
in sight, 364.
packing in, 379.
panel, 372.
permanence, 365.
pillars in, 392.
pocket, 376.
practice in, 385.
prospecting, 363.
protection in, 3.
quarrying, 382.
rate of sinking, 367.
reports, 360.
reworking mines, 387.
river, 380.
room, 371, 373.
room-and-pillar, 373.
royalties, 358.
salting in, 388.
sampling in, 364.
shaft sinking, 367.
steam shovel work, 381.
stopping in, 376.
stowing in mines, 379.
temperature in, 387.
thick deposits, 375.
under-sea, 379.
value of, 364.
waste, use of, 379.
waste in, 387.
- Minnesota, *see* Districts.
Mints, 203.
Mississippi, 220; *see* Districts.
Missouri, 220.
Models, mine, 203.
Molybdenum, determination of, 22.
Monazite, *see* Geology.
Montana, *see* Districts.
Mortality in mines, 1.
Mortars, 46.
Mucking, 293.
- Nebraska, *see* Districts.
Nevada, *see* Districts.
New Caledonia, *see* Districts.
Newfoundland, *see* Districts.
New Jersey, *see* Districts.
New Mexico, *see* Districts.

- New York, see Districts.
 New Zealand, see Districts.
 Nicaragua, see Districts.
 Nickel, 349.
 determination of, 26.
 metallurgy of, 341.
 Nitrates, 451.
 Norway, see Districts.
 Nova Scotia, see Districts.

 Occurrence of cement materials, see
 Geology and Districts.
 of diamonds, see Geology.
 of gas in coal, 354.
 Ocean transportation, 416.
 Ocher, see Geology.
 Ohio, see Districts.
 Oil, 211.
 as a generator of power, 211.
 engines, 300.
 Oklahoma, see Districts.
 Onyx, see Geology.
 Open-cut mining, 381.
 Operation of compressors, 28.
 of conveyors, 49.
 Ore bins, 351.
 bodies, measurement of, 758.
 deposits, 234.
 in sight, 364.
 reserves, 364.
 sampling of, 408.
 thefts, 307.
 value of, 347.
 Oregon, see Districts.
 Organization, 309.
 Origin of coal, 234.
 of diamonds, 349.
 of petroleum, 234.
 Outbursts of gas, 354.
 Overcasts, 420.
 Overwinding in hoisting, 300.

 Packing mine workings, 379.
 costs of, 93.
 Paint manufacture, 24, 168.
 Pan amalgamation, 36.
 Panama, see Districts.
 Panel mining, 372.
 Paper ropes, 406.
 Patio amalgamation, 36.
 Peat, see Geology.
 Pennsylvania, see Districts.

 Periodicals, mining, etc., 201.
 Permanency, 365.
 Persia, see Districts.
 Peru, see Districts.
 Petroleum, 211.
 Philippine Islands, see Districts.
 Phosphates, 349; see Geology.
 Photography, 396.
 Pillars, barrier, 392.
 in mining, 392.
 size of, 392.
 Pipes and pipe fittings, 182, 398.
 costs of, 93.
 Plates and amalgamation, 35.
 Plants, fossil, 226.
 power, 396.
 Platinum, see Geology.
 Plumbing shafts, 414.
 Pneumatic hoisting, 300.
 Pocket mining, 376.
 Poisoning and injuries, 17.
 Pollution of water, 423.
 Portage, 414.
 costs of, 93.
 water, 181.
 Portugal, see Districts.
 Powder explosions, 17.
 Power drills, 183.
 Power, steam, water, electricity, etc.,
 396.
 applications of, 396.
 boiler, calculations, 396.
 compounds, 398.
 feed-water, 397.
 horse-power, 397.
 tests, 397.
 boilers, steam, 397.
 central power plant, 398.
 condensers, 398.
 costs of, 93.
 consumption of coal, 398.
 of steam, 398.
 electric power plant, 399.
 electricity in the mine, 399.
 equipment of electric power plant,
 399.
 gas engines, 212.
 governors, 398.
 horse-power of steam engines, 397.
 mechanical feeders for, 398.
 oil engines, 211.
 plants, power, 396.

- Power:** scale compounds, 398.
steam engine calculations, 397.
pipes and coverings, 398.
superheated steam, 397.
wet steam, 397.
tests for steam engine, 397.
transmission, 401.
valve and valve gear, 398.
waste of coal, 398.
of steam, 398.
water-power plants, 398.
water wheels, 398.
- Practice in milling,** 42.
of reduction, 735.
sampling, 409.
- Precious stones,** 349.
- Preparation of coal,** 30.
- Preservation of materials,** 395.
- Prevention of accidents,** 3.
of overwinding, 300.
- Principles of law,** 355.
- Processes,** 314, 325, 334.
metallurgical, 341.
- Production of mineral products,** 188.
costs of, 97.
of precious metals, 189.
- Progress and studies in geology,** 227.
- Properties of metals,** 346.
of coke, 210.
of explosions, 206.
- Prospect drilling,** 185.
- Prospecting,** 363.
costs of, 98.
- Protection in mining,** 3.
- Protection of iron,** 389.
of ropes, 406.
- Pulleys,** 388.
- Pumping,** 180, 181.
costs of, 98.
electrical, 181.
- Pumps for mine use,** 180.
tests of, 180.
- Purification of water,** 423.
- Pyritic smelting,** 322.
of copper, 322.
- Quantity of explosive used,** 208.
quarrying, 382.
- Quicksilver,** 349; see *Geology and Districts*.
metallurgy of, 341.
- Radium,** 349.
- Rails,** 415.
sections, 415.
- Raises,** 367.
- Rare metals,** 117, 118, 280.
metallurgy of, 341.
- Rate of tunneling,** 418.
of drilling, 187.
of sinking, 367.
- Rating of mining property,** 312.
- Reamers for boring apparatus,** 188.
- Reduction of ores,** 401.
ball mills, 404.
costs of, 99.
crushers, 402.
construction of, 402.
operation of, 402.
feeders, automatic, 402.
fine crushing, 404.
methods of, 401.
mills, 404.
miscellaneous types, 404.
practice of, 401.
rolls, 402.
construction of, 402.
operation of, 402.
stamp-mill practice, 402.
tube mills, 404.
- Refining copper,** 323.
gold and silver, 335.
- Regulations,** 13.
explosive, 206.
- Regulators,** 420.
- Reports, mining,** 360, 364.
- Requirements of education,** 204.
- Research work,** 202.
- Rescue work in mines,** 7.
- Reverberatory melting of copper,** 322.
- Reworking abandoned mines,** 387.
- Rights,** 358.
- Riparian and water rights,** 358.
- Risks, mining,** 312.
- River mining,** 380.
transportation, 416.
- Roasting ores,** 342.
- Robbing pillars,** 372.
- Rolls,** 402.
construction of, 402.
operation of, 402.
- Room-and-pillar,** 371.
- Ropes,** 302, 406.

- Ropes: breakage of, 407.
 - care of, 406.
 - connection of, 406.
 - costs of, 100.
 - examination of, 406.
 - fiber, 406.
 - for mining purposes, 406.
 - kinds of, 406.
 - manufacture of, 406.
 - paper, 406.
 - protection of, 406.
 - splicing, 406.
 - strength of, 406.
 - tests of, 406.
 - working stresses, 406.
- Rotary drills, 187.
 - dumps, 194.
 - pumps, 180.
- Royalties, 358.
 - costs of, 100.
- Ruby, see Geology.
- Rules for faults, 233.
- Running gear, 297.
- Russia, see Districts.

- Safety catches for cages, 302.
 - explosives, 206.
 - lamps, 359.
- Salt, 349; see Geology and Districts.
 - making, 42.
- Salting mines, 388.
- Sampling mines, 407.
 - apparatus employed, 407.
 - coal, sampling of, 408.
 - costs of, 101.
 - gravel, sampling of, 409.
 - methods of, 407.
 - mineral, sampling of, 408.
 - ore bodies, measurement of, 409.
 - ores, sampling of, 408.
 - practice in sampling, 409.
- Sand treatment, 41.
- Sapphires, see Geology.
- Scale compounds for boilers, 398.
- Scandinavia, see Districts.
- Schools, engineering, 199.
- Screens, 410.
 - kinds of, 410.
 - operation of, 410.
- Self-dumping cages, 194.
- Selling ore, 310.
- Shaft-bottom layouts, 301.

- Shafts, closing arrangements, 303.
 - lighting, 359.
 - lining of, 393.
 - plumbing, 414.
 - sinking, 367.
 - costs of, 101.
 - unwatering, 182.
 - water rings, 180.
- Shape of air ways, 420.
- Sheaves, 301.
- Shops, 350.
- Signaling in mines, 411.
 - codes for, 411.
 - compressed air, 411.
 - costs of, 103.
 - electricity, 411.
 - methods of, 411.
 - telephones, 411.
- Silver, 324, 346, 348; see Geology and Districts.
 - amalgamation of, 34.
 - analysis of, 24.
- Siphons, 181.
- Siphons in mines, 181.
- Sites, mill, 358.
- Size of air ways, 420.
 - pillars, 392.
- Sizing of mineral, 410.
 - costs of, 103.
 - screens, kinds of, 410.
 - operation of, 410.
 - theory of sizing, 410.
- Skip, dump, 194, 301.
 - for hoisting, 301.
- Slime treatment, 40.
- Smelting of copper, 321.
 - of gold, 325.
 - of silver, 325.
- Smoke problem, 342.
- Snow slides, 17.
- Societies, 201.
- Solutions of faults, 233.
- Sorting, costs of, 103.
- Sources of water, 421.
- South Dakota, see Districts.
- Spain, see Districts.
- Speed of hoisting, 299.
- Splicing of rope, 406.
- Splitting, air, 419.
- Spontaneous combustion, 14.
- Square-sets, 394.

- Stability of dams, 116.
- Stables, mine, 18.
- Stamp-mill practice, 402.
- States, laws, 355.
- Steam engine calculations, 397.
 - locomotives, 296.
 - pipes and coverings, 398.
 - shovels in mining, 381.
- Stockholders, 311.
- Stocks, 311.
- Stopping, 376.
 - costs of, 103.
 - methods, 376.
- Stoppings, 420.
- Storage of mineral, 293.
- Storing explosives, 208.
- Strength of rope, 406.
 - of timber, 391.
- Stresses in dams, 116.
- Strikes, 306.
- Stripping, costs of, 104.
- Submarine blasting, 20, 188.
 - drilling, 188.
- Subsidence in mines, 391.
- Substitutes for fuels, 212.
- Sulphur, *see* Geology and Districts.
 - determination of, 24.
- Summer school work, 202.
- Sumps, 182.
- Superheated steam, 397.
- Superintendents, 310.
- Supplies, costs of, 104.
- Support in mines, 390.
 - cementation, 393.
 - coal and iron for, 391.
 - conditions affecting, 390.
 - costs of, 98, 104.
 - iron for, 391.
 - kinds of, 390.
 - masonry, 391.
 - pillars, barrier, 392.
 - size of, 392.
 - shaft lining, 393.
 - subsidence, 391.
 - timber, kinds of, 390.
 - preservation of, 395.
 - strength of, 391.
 - timbering, 392.
 - methods of, 392.
 - square sets, 394.
 - tubbing, 393.
 - tunnel support, 393.
- Surface surveys, 413.
- Surveying, 412.
 - bore holes, 188.
 - claims, 413.
 - costs of, 107.
 - instruments, 412.
 - magnetic surveys, 413.
 - methods, 412.
 - shaft plumbing, 414.
 - surface, 413.
 - underground, 413.
- Surveys, geological, 215.
- Sweden, *see* Districts.
- Switches, 298.
- Symbols, 303.
- Systems of haulage, 295.
- Tables, concentrating, 37.
- Tamping and materials, 20.
- Tanks, 352.
- Taxation of mining properties, 312.
- Taxes, 357; *see* Districts.
- Technical education, 195.
 - costs of, 100.
- Telephones in mines, 411.
- Tellurium, determination of, 22.
- Tempering drills, 184.
- Tennessee, *see* Districts.
- Testing explosives, 208.
 - fuels, 31, 213.
 - gases, 354, 359.
 - safety lamps, 359.
- Tests for mine gases, 354
 - for fans, 420.
 - for minerals, 39.
 - for pumps, 180.
 - for steam engines, 397
 - of rope, 406.
- Texas, *see* Districts.
- Textbooks, 195.
- Thawing explosives, 209.
- Theory of concentration, 31.
 - of compression, 29.
 - of cyaniding, 325.
 - of education, 301.
 - of explosives, 206.
 - of metallurgy, 314.
 - of ore deposits, 234.
 - of pumping, 180.
 - of sizing, 410.
- Timber, kinds of, 390.
 - costs of, 98.

- Timber: preservation, 395.
- strength, 391.
- Timbering, 393.
- methods, 392.
- square sets, 394.
- Tin, see *Geology and Districts*.
- determination of, 26.
- metallurgy, 343.
- Tipples, 194, 350.
- Tracks, 298.
- Tractive force, 295.
- Trade schools, 200.
- Tramming, 293.
- costs of, 107.
- Transmission of power by compressed
 - air, 401.
 - by electrical power, 401.
 - by ropes, 401.
 - by steam, 401.
- Transportation, 414.
- cableways, 416.
- costs of, 107.
- canals, 416.
- cars, capacity of, 415.
- costs of, 108.
- fluming, 414.
- gauge, 415.
- lake, 416.
- methods of, 414.
- ocean, 416.
- packing, 414.
- portage, 414.
- rail, 415.
- rails, 415.
- rail-section, 415.
- roads, wagon, 416.
- wagon, 416.
- Tubbing, 393.
- Tube-mills, 404.
- Tungsten, see *Geology*.
- determination of, 26.
- Tunneling, 417, 418.
- costs of, 112.
- examples of, 417.
- machines, 418.
- methods of, 417.
- Tunnels, 417.
- drainage, 182.
- rights, 358.
- support, 393.
- Turkey, see *Districts*.
- Turnouts, 298.
- Turntables, 298.
- Turquoise, see *Geology*.
- Types of compressors, 28.
- of veins, 232.
- Underground conveyors, 49.
- dams, 116.
- surveying, 413.
- Under-sea mining, 379.
- Unions, labor, 307.
- United States, see *Districts*.
- Unloading cars and boats, 294.
- Unwatering shafts, 182.
- Use of bore holes, 185.
- of explosives, 207.
- of gas, 185.
- of mine and mill machinery, 388.
- Vacuum pumps, 181.
- Value of fuels, 213.
- of mines, 364.
- of ore, 347.
- Valves and valve-gear, 182, 398.
- Veins, types, 232.
- Venezuela, see *Districts*.
- Ventilation of mines, 419.
- air, quantity of needed, 420.
- air-currents, splitting of, 419.
- measurement of, 420.
- costs of, 115.
- doors, 420.
- fans, construction and use, 419.
- tests on, 420.
- in coal mines, 420.
- in metal mines, 420.
- measurement of air, 420.
- mechanical ventilators, 419.
- methods, 419.
- overcosts in mines, 420.
- quantity of air needed, 420.
- regulators, 420.
- shape of air-ways, 420.
- size of air-ways, 420.
- splitting air currents, 419.
- stoppings, 420.
- Volcanoes, 233.
- Wages, 307.
- Wagon, 416.
- Washing coal and mineral, 38.
- costs of, 115.
- Washington, see *Districts*.

- Waste, in mines, 39, 387.
 - of coal, 398.
 - of steam, 398.
 - use of, 379.
- Water, 421.
 - costs of, 116.
 - failing, 181.
 - in milling, 423.
 - measurement of, 422.
 - pollution of, 423.
 - portage, 181.
 - purification, 423.
 - rights, 358.
 - sources of, 421.
 - supplies, 421.
- Water-power, 398.
 - hoisting, 300.
 - plants, 398.
 - wheels, 398.
- Weights, 202.
 - of ore, 348.
- West Indies, see Districts.
- West Virginia, see Districts.
- Wet steam, 397.
- Wetting down dust, 10.
- Wheelbarrows, 298.
- Wheels, car, 297.
- Whims, 301.
- Windlasses, 301.
- Winzes, 367.
- Wisconsin, see Districts.
- Wolframite, see Geology and Districts.
 - determination of, 22.
- Working stresses, 406.
- Workmen, 304.
- Workmen's aid, 306.
 - compensation, 306.
 - insurance, 306.
- Works, metallurgical, 315.
- Zinc, see Geology and Districts.
 - determination of, 25.
 - metallurgy of, 344.
 - ores, 349.



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